

**UNITED STATES BANKRUPTCY COURT  
EASTERN DISTRICT OF MICHIGAN  
SOUTHERN DIVISION**

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In re : Chapter 9  
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CITY OF DETROIT, MICHIGAN, : Case No. 13- 53846  
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Debtor. : Hon. Steven W. Rhodes  
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**CITY OF DETROIT'S REPLY  
TO SYNCORA'S RESPONSE IN OPPOSITION  
TO THE CITY OF DETROIT'S MOTION FOR LEAVE TO SERVE  
THE SUPPLEMENTAL EXPERT REPORT OF CAROLINE SALLEE**

Syncora appears to have written its response before reading the Supplemental Report of Caroline Sallee, which was attached as Exhibit 6 to the City's Motion.<sup>1</sup> Rather than addressing the opinions actually expressed in the Supplemental Report, Syncora focuses its attack instead on the mistaken

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<sup>1</sup> See *City of Detroit's Motion for Leave to Serve the Supplemental Expert Report of Caroline Sallee* (the "Motion") [Docket No. 6779]. For the responses of Syncora and FGIC, see *Response in Opposition to City of Detroit's Motion for Leave to Serve the Supplemental Expert Report of Caroline Sallee* (the "Syncora Response") [Docket No. 6782] and *Financial Guaranty Insurance Company's Joinder in Syncora's Response in Opposition to the City of Detroit's Motion for Leave to Serve the Supplemental Expert Report of Caroline Sallee* (the "FGIC Response") [Docket No. 6801]. Capitalized terms have the meanings ascribed to them in the Motion, the Syncora Response, and the FGIC Response.

impression that Ms. Sallee will be opining upon whether the City could raise additional revenue by increasing taxes. Ms. Sallee, however, has not analyzed and does not intend to opine upon whether it would be appropriate for the City to raise taxes. The reason for this is simple: As this court has held, the City is at its statutory maximum tax rates and “cannot legally increase its tax revenues.” *In re City of Detroit, Mich.*, 504 B.R. 97, 121 (Bankr. E.D. Mich. 2013) (“Eligibility Opinion”). What the Supplemental Report *does* offer, instead, are Ms. Sallee’s opinions regarding the likely effect on property tax rates, property values, and property tax revenues of the *automatic* tax levy that would result from creditors exercising their rights under section 6093 of the Michigan Revised Judicature Act (“RJA”). *See* MCL § 600.6093. These opinions are directly responsive to new opinions offered by expert witnesses for Syncora and FGIC, are being offered weeks before Ms. Sallee’s expected rebuttal testimony to avoid surprise or prejudice to Syncora and FGIC, and are entirely appropriate.

## **ARGUMENT**

1. In her July 8, 2014, report, Ms. Sallee opined simply that the City’s 10- and 40-year property tax and state revenue sharing projections “are reasonable forecasts of expected revenue during the period in question.” Report of Caroline Sallee, at 2-3, attached hereto as Exhibit 1. The scope of Ms. Sallee’s initial expert report was limited to (a) an explanation of her methodology and

assumptions in creating the City’s revenue forecasts, and (b) an expression of her expert opinion that these forecasts were reasonable. Consistent with standard forecasting procedure, Ms. Sallee’s opinion was based entirely on current law, and did not opine about the revenues that could be expected under alternative tax policies.

2. On July 25, Syncora served the report of its economics expert, Dr. Glenn Meyers. As expected, Dr. Meyers’ report disputed the methodology and conclusions offered by Ms. Sallee, opining that Ms. Sallee’s property tax revenue forecasts were unreasonably low. However, Dr. Meyers then went beyond the scope of Ms. Sallee’s opinions to offer his own, new opinions on “Potential Tax Measures” the City could implement and the “Effects of Hypothesized Tax Measures on the City’s Economic Prospects.” Expert Report of Dr. Glenn Meyers, at 48, 55 (July 25, 2014) (the “Meyers Report”), attached hereto as Exhibit 2.

3. In particular, Dr. Meyers opined that “another option available to the City is to increase taxes” and that “[t]here are well-established economic principles that may be considered in determining appropriate tax increases.” *Id.* at 48. When asked at his deposition whether he understood that “there cannot be a property tax increase for Detroit without a change of law of the State of Michigan,” Dr. Meyers stated, “That’s not my understanding. . . . [A]s I understand it, with reference to the property tax, there is, in the case of a judgment, a requirement that

the City raise property tax sufficiently to cover the judgment.” Tr. of Videotaped Deposition of Glenn Meyers, at 37-38 (Aug. 1, 2014) (the “Meyers Deposition”), attached hereto as Exhibit 3. This was a reference to the judgment levy mandated by the RJA, which compels municipalities to levy property taxes above and beyond statutory and constitutional ceilings to satisfy judgments entered against them. *See* MCL § 600.6093.

4. Upon further questioning, Dr. Meyers conceded that the levying of such additional property taxes would have the effect of lowering property values—a concept known as “tax capitalization”—and that the amount of the judgments against the City in the event creditors were free to sue the City for amounts they are owed would be “several billion dollars.” *See* Meyers Deposition, at 45-48, 199. Dr. Meyers nevertheless maintained that this tax increase would only have a modest effect on property values. *See* Meyers Report, at 53.

5. These, of course, were new opinions, and not simply ones offered in rebuttal of any opinion the City had previously offered. The City determined that it would take expert testimony to rebut expert testimony and therefore asked Ms. Sallee to model the effects on property tax rates, property values, and property tax revenues that would actually result from creditors exercising their state-law rights under the RJA.

6. As set forth in her proposed Supplemental Report, Ms. Sallee determined that \$9.1 billion of judgments enforced under the RJA—even when the payments were spread out over ten years—would result in the mandatory levy of an additional property tax of 28% of taxable value, far higher than the additional levy (0.12%) that Dr. Meyers had modeled. *See* Supplemental Report of Caroline Sallee, at 12. Ms. Sallee determined that this additional property tax levy would increase the property tax payments due from residents by more than ten times. *Id.* at 14. In addition, using the concept of tax capitalization attested to by Dr. Meyers and his own assumptions, Ms. Sallee determined that the RJA levy would decrease the value of all property in the City by 55% in the first year following the levy and would thereby decrease the City’s property tax revenues by 45% over the next decade. *Id.* at 3.

7. The Court’s scheduling order specified dates for the City to file its expert reports (July 8) and for objecting parties such as Syncora to file rebuttal reports (July 25). However, the Order made no provision for the filing of supplemental expert reports by the City in the event that Syncora or other objectors introduced new matters in their expert reports. The City submits that it should be granted leave to offer additional expert opinions to contest the expert opinions Syncora raised for the first time in Dr. Meyers’ report. In the interest of orderly

procedure, the City prepared the Supplemental Report of Ms. Sallee so that Syncora and other objectors would have timely notice of this rebuttal opinion.

8. Syncora and FGIC refused to consent to the City's request that it be granted leave to serve the Supplemental Report. However, rather than address the actual content of Ms. Sallee's report, Syncora's response to the City's motion instead argues that the Supplemental Report is a "desperate 13th-hour effort by the City to plug a gaping hole in its proof." Syncora Response, at 5. This is simply wrong. This court has already found that "[t]he City cannot legally increase its tax revenues," *In re City of Detroit, Mich.*, 504 B.R. at 121, and the City intends to adduce additional evidence to this effect in the hearing on plan confirmation. Syncora's argument that the City should have conducted an additional, hypothetical study of the impact of tax increases it has no authority to impose is baseless. Indeed, such a study would have been both inappropriate and irrelevant.<sup>2</sup>

9. Nor is there merit to Syncora's argument that it will suffer prejudice if the City is allowed to serve the Supplemental Report. Ms. Sallee's opinions are being offered in rebuttal to those of Dr. Meyers and, as such, will be presented in the City's rebuttal case. Under the Court's current schedule, that segment of the case is unlikely to begin for over a month, giving Syncora and other

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<sup>2</sup> Syncora's response also takes gratuitous shots at the expert opinions of Kenneth Buckfire. The City will respond to these points in its response to Syncora's *Daubert* motion against Mr. Buckfire, which will be filed on August 27, 2014.

objecting parties ample time to prepare for Ms. Sallee's rebuttal testimony and depose her if they see fit. Ms. Sallee's Supplemental Report spans only 16 double-spaced pages, and identifies only 3 new materials considered by Ms. Sallee that had not previously been disclosed. *See* Supplemental Report of Caroline Sallee, at Ex. B. No delay in the hearing schedule will be required or warranted if the City is permitted to serve the Supplemental Report.

10. Indeed, if there were any prejudice here, it would be prejudice to the City itself. Syncora is asking, at bottom, that the City be deprived of any opportunity to contest the opinion of its experts and for Dr. Meyers' opinion to go unrebutted. The City does not believe that the Court's scheduling order intended to make expert testimony a one-way street, as Syncora argues.

## **CONCLUSION**

For the foregoing reasons, the City respectfully requests that the Court grant its Motion for Leave to Serve the Supplemental Expert Report of Caroline Sallee.

Dated: August 20, 2014

Respectfully submitted,

/s/ David G. Heiman

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ATTORNEYS FOR THE CITY OF DETROIT

# **EXHIBIT 1**

**UNITED STATES BANKRUPTCY COURT  
EASTERN DISTRICT OF MICHIGAN  
SOUTHERN DIVISION**

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In re : Chapter 9  
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CITY OF DETROIT, MICHIGAN, : Case No. 13-53846  
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Debtor. : Hon. Steven W. Rhodes  
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**REPORT OF CAROLINE SALLEE**

Pursuant to Federal Rule of Civil Procedure 26(a)(2)(B), made applicable to this proceeding by Federal Rule of Bankruptcy Procedure 7026, debtor the City of Detroit submits this report with respect to the expected expert testimony of Caroline Sallee.

**INTRODUCTION**

Caroline Sallee is a Manager in the Quantitative Economics & Statistics practice (“QUEST”) of the firm Ernst & Young (“E&Y”). It is the City’s intention to call Ms. Sallee to testify about the forecasted revenues the City may expect in future years from its real and personal property general operating taxes and from revenue sharing funds it will receive from the State of Michigan.

The information in this report is presented as of the date of this report and is based upon forecasts contained within the Fourth Amended Disclosure Statement With Respect to Fourth Amended Plan for the Adjustment of Debts of the City of Detroit [Docket No. 4391] dated May 5, 2014 (the “Disclosure Statement”), as such forecasts were updated as of July 2, 2014. *See* Ten-Year Plan of Adjustment, Restructuring and Reinvestment Initiatives [POA00706449 –POA00706518] (“10-Year Restructuring and Reinvestment Initiatives”); Ten-Year Financial Projections [POA00706519 – POA00706600] (“10-Year Forecast”); Plan of Adjustment – 40 Year Projections [POA00706603 – POA00706611] (“40-Year Forecast”).

## **OPINIONS**

Ms. Sallee will offer the following opinions:

### **I. Real and Personal Property General Operating Tax Revenues**

A. **10-Year Forecast:** For the period ending with the City’s 2023 fiscal year, the projected revenues the City can expect from the real and personal property general operating taxes it levies are set forth in the 10-Year Forecast, in particular at Exhibits 2-4 and Appendices A.26a, B.1a, and B.1b. *See* POA00706519 – POA00706600. These are reasonable forecasts of expected revenue during the period in question.

**B. 40-Year Forecast:** For each of the four ten-year periods ending with the City's 2053 fiscal year, the City can expect forecasted revenues from its real and personal property general operating taxes as set forth in the 40-Year Forecast, in particular at Exhibits 3a-b. *See* POA00706603 – POA00706611. These are reasonable forecasts of expected revenue during the period in question.

## **II. State Revenue Sharing Revenues**

**A. 10-Year Forecast:** For the period ending with the City's 2023 fiscal year, the projected revenue sharing funds the City can expect from the State of Michigan are set forth in the 10-Year Forecast, in particular at Exhibits 2-4 and Appendices A.26a and B4. *See* POA00706519 – POA00706600. These are reasonable forecasts of expected revenue during the period in question.

**B. 40-Year Forecast:** For each of the four ten-year periods ending with the City's 2053 fiscal year, the forecasted revenue sharing funds the City can expect from the State of Michigan are set forth in the 40-Year Forecast, in particular at Exhibits 3a-b. *See* POA00706603 – POA00706611. These are reasonable forecasts of expected revenue during the period in question.

## **BASIS AND REASONS FOR OPINIONS**

### **Real And Personal Property General Operating Taxes**

#### **I. Methodology**

In reaching her opinions, Ms. Sallee followed standard forecasting procedures used by the State of Michigan Consensus Revenue Estimating Conference and by U.S. federal agencies such as the Congressional Budget Office.

Ms. Sallee used the following methodology:

A. Reviewed historical data on Detroit and Michigan property taxes, economic variables, and housing indicators.

i. Ms. Sallee collected historical data on property assessments and taxable value by property class in the City of Detroit and the State of Michigan.

Ms. Sallee collected City of Detroit taxable value, capped value, assessed value, collection rates, and tax rates by property class, which includes real and personal property for residential, commercial, and industrial classes and personal property only for the utility class from the following sources:

a) Michigan State Tax Commission for taxable values and assessed values by property class in the City of Detroit and the State of Michigan for tax years 2000-2012.

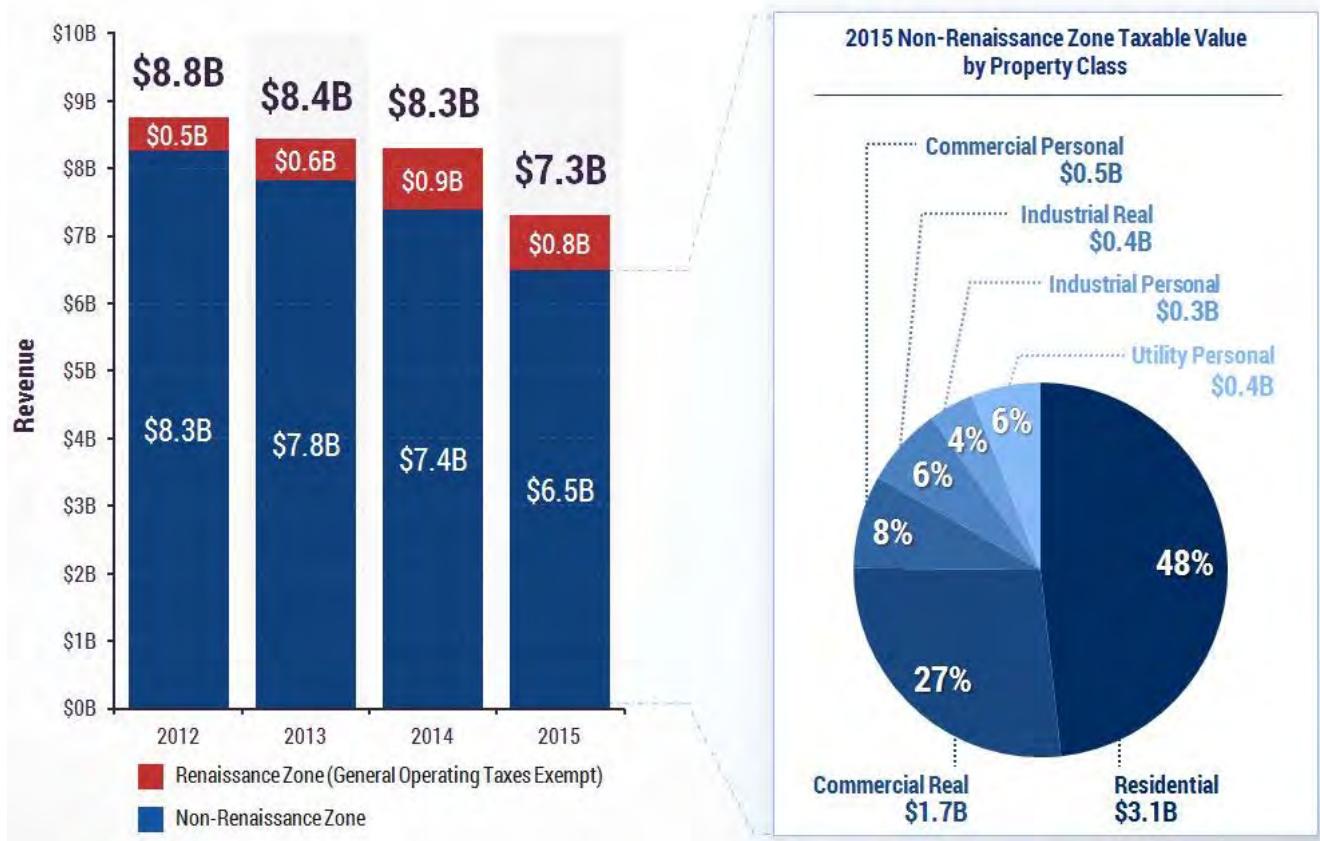
- b) The City of Detroit's Ad Valorem State Tax Commission Assessment Roll Certification for tax years 2011, 2012, and 2013, and ad valorem data provided by the City for 2014.
  - c) Renaissance Zone property by property class for tax year 2013, provided by the City.
- ii. Ms. Sallee reviewed economic and housing indicators for the United States, the State of Michigan, and the City of Detroit for use in developing the baseline forecast, which is identified as the “without reinvestment” scenario in the 10-Year Forecast. *See* POA00706587. Ms. Sallee relied on data from the following sources:
- a) Congressional Budget Office, “The Budget and Economic Outlook for Fiscal Years 2013 to 2023” (Feb. 2013).
  - b) House Fiscal Agency, Economic Outlook and Revenue Estimates for Michigan (May 2013, Jan. 2014, May 2014).
  - c) City of Detroit, “Revenue Consensus Conference Final Report” (Feb. 7, 2013).
  - d) Case-Shiller Home Price Index for Detroit, Michigan from the Federal Reserve Bank of St. Louis, Economic Research Division (1991-Apr. 2014).

- e) Detroit Board of Realtors residential sales statistics obtained from the Michigan Association of Realtors website (1995, 1998, 2001-2013).
- f) U.S. Bureau of Census, Building Permits Survey for Wayne County (1998 – 2013).

B. Developed a baseline of property tax collections for the 10-Year Forecast period. Ms. Sallee completed the following steps:

- i. Estimated taxable value by property class subject to City of Detroit general operating taxes.
  - a) Ms. Sallee estimated the total taxable value subject to City of Detroit general operating taxes by property class beginning with FY 2012. Total taxable value by property class was obtained from the City of Detroit for tax years 2011, 2012, 2013, and 2014 (FY 2012 – FY 2015). The City of Detroit Assessor's Office provided detailed Renaissance Zone taxable value by property class for real and personal property for only tax year 2013 (FY 2014).
  - b) Ms. Sallee used this data to estimate taxable value by property class not in a Renaissance Zone and thus subject to general operating taxes in FY 2012, FY 2013, FY 2014 and FY 2015. *See Figure 1.*

**Figure 1. Total Taxable Value for City of Detroit, FY 2012 – FY 2015**



c) Ms. Sallee forecasted taxable value for FY 2016 – FY 2023 using separate growth rates for real and personal property by property class. She performed an analysis of four factors affecting residential property to select residential taxable value growth rates: (1) additions to the tax base, (2) losses to the tax base, (3) uncapping of taxable value as property sells, and (4) planned reassessments by the City of Detroit. Ms. Sallee selected separate growth rates for commercial and industrial property, both real and

personal, and personal property for utility property, based on projected economic conditions in the City of Detroit, analysis of historical data, and a review of large taxpayers in the City.

ii. Selected a tax rate.

- a) Ms. Sallee selected the current general operating tax rate for property taxes in the City of Detroit for the forecast period.
- b) Pursuant to standard forecasting procedures, Ms. Sallee assumed that the tax law will remain unchanged during the forecast time periods.

iii. Forecasted the tax levy.

- a) Ms. Sallee forecasted the City of Detroit's property tax levy for the forecast period by multiplying the forecasted taxable value subject to general operating taxes by the tax rate.

iv. Adjust the tax levy for known legal and policy changes.

- a) Ms. Sallee made adjustments for upcoming legal changes and City activities that will affect property tax collections. Ms. Sallee lowered property tax collections from commercial and industrial personal property by 10% for years after FY 2014, reflecting the upcoming vote on the personal property tax repeal in August of 2014.

- b) Ms. Sallee also took into account City-planned reassessments of property in FY 2015 and the effects of the City-wide reappraisal study.
- v. Selected an effective collections rate.
  - a) Ms. Sallee applied an effective collections rate to the tax levy by calculating all payments related to property taxes received by the City in a given fiscal year divided by that fiscal year's tax levy.
  - b) The effective collections rate includes both property taxes paid on-time (non-delinquent) to the City and payments the City receives from the Wayne County Delinquent Tax Revolving Fund pursuant to Public Act 246 of 2003.

- C. Developed a “with reinvestment” scenario of property taxes.
  - i. The City of Detroit Plan of Adjustment outlines steps for improving the physical infrastructure and operations of the City during a 40-year time period. The “with reinvestment” scenario estimates improvements to the tax base and collections if the general operations and economic environment of the City improve during the 10-year period.
  - ii. To model the effects of reinvestment, Ms. Sallee used historical data and information on the different property tax bases, including tax

collections during other economic time periods and growth rates after recessions.

D. Extrapolated property tax revenues for the 40-Year Forecast.

- i. Ms. Sallee completed the 40-Year Forecast of property tax revenues using forecasted national trends in home prices between 2019 and 2023 and the City of Detroit's historical compounded average annual increase in taxable value between 2000 and 2013.
- ii. Ms. Sallee modeled property tax collections in FY 2023 to FY 2027 to follow national trends using the Federal Housing Finance Agency house price index as forecasted by the Congressional Budget Office for years 2019 to 2023.
- iii. After FY 2027, Ms. Sallee lowered the growth rate of property tax collections gradually to 2% by FY 2033. Ms. Sallee used a long-run equilibrium growth rate of 1.5% in years after FY 2033.
- iv. Ms. Sallee chose the long-run growth rate of 1.5% based on analysis of the City's compounded annual growth rate (CAGR) in taxable value for tax years 2000 and 2013. Ms. Sallee relied upon historical taxable value data from the Michigan State Tax Commission.

## **II. Assumptions**

Documents and other materials supporting Ms. Sallee's opinions have been or will be produced by the City. In addition, certain of the assumptions underlying Ms. Sallee's analysis and opinions are set forth in the 10-Year and 40-Year Forecasts. Ms. Sallee also made the following assumptions.

### **10-Year Forecast**

In the 10-Year Forecast, Ms. Sallee assumed that the taxable value of property will continue to decline until FY 2020. By FY 2022 and FY 2023, improved operations and other factors will cause property tax collections to increase for the City of Detroit.

#### **A. Baseline Forecast**

##### **i. Population Assumptions**

- a) Ms. Sallee used the Southeast Michigan Council of Governments (SEMCOG) population forecasts, scenario 1a for the analysis.

Population in the City of Detroit is expected to decline each year between FY 2013 and FY 2023 at an average annual rate of -0.7%.

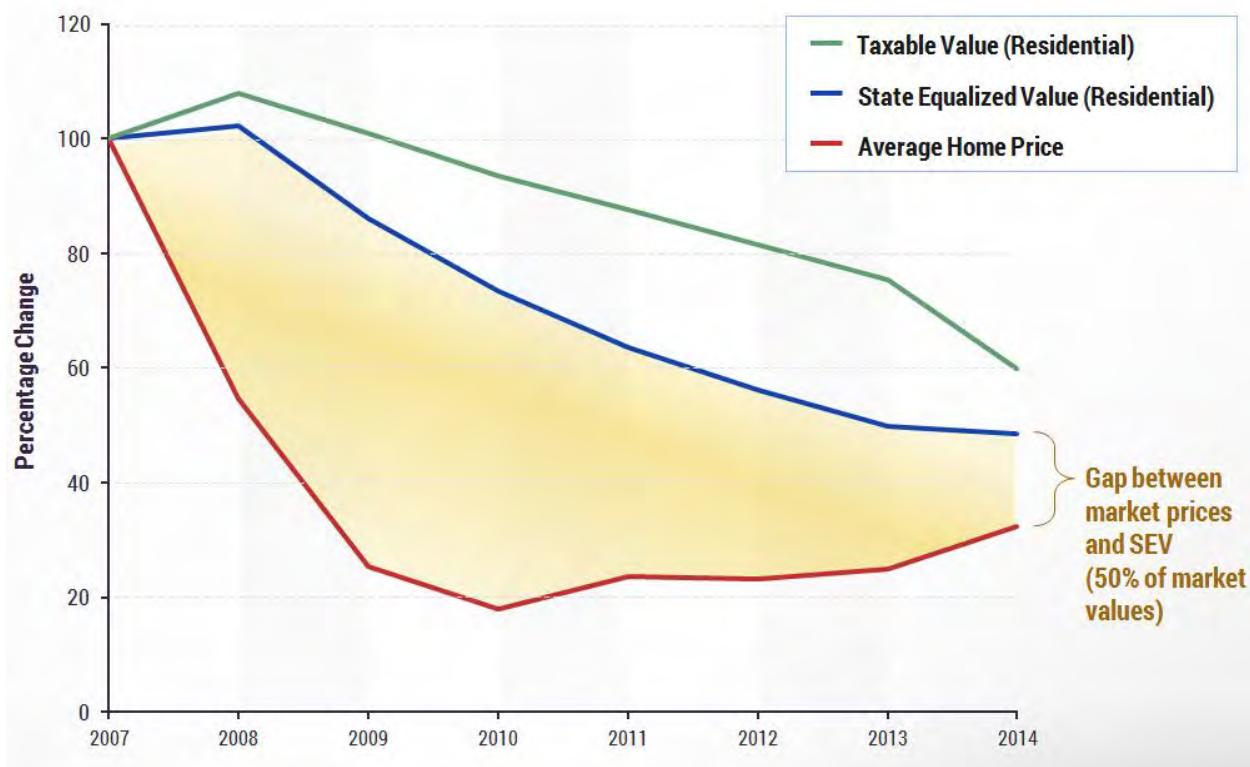
##### **ii. Taxable Values: Residential Property**

- a) Ms. Sallee forecasted taxable value for real and personal property by selecting growth rates for each type of property. She modeled four factors that affect taxable value for residential property:

- 1) Ms. Sallee estimated additions to the tax base using U.S. Census building permit data for Wayne County. Ms. Sallee multiplied the cost of new construction in Wayne County per the U.S. Census building permit data by the City of Detroit's share of real property taxable value in Wayne County (19%) to arrive at the City's estimated share of new construction value in Wayne County, which was 1% in 2012 and 2013. This translated into a 0.5% increase in taxable value. Along with additions to existing properties, the analysis assumed an increase to residential taxable value of 1% per year during FY 2015 through FY 2021 and 1.5% in FY 2022 and FY 2023.
- 2) Population declines, anticipated abandonment, and rental vacancies will cause losses to the tax base. Ms. Sallee used SEMCOG's scenario 1a to estimate losses to the tax base. After FY 2015, SEMCOG forecasts average annual population losses to be between -0.8% and -0.4% per year. Losses to residential taxable value are assumed to be between -1.5% and -2% per year after FY 2015.
- 3) Taxable value is defined as the lesser of state equalized value (50% of true cash value) and capped value (taxable value grown annually by 5% or the rate of inflation, whichever is less, not counting additions). When a house sells, the taxable value is reset to state equalized value

in the first year. The forecast projects continued losses to taxable value due to the uncapping of taxable value when homes sell. According to Detroit Association of Realtors data, average existing home prices in Detroit fell 63% between 2006 (pre-recession) and 2013. The state equalized value of residential property, however, only declined 54%. *See Figure 2.* This gap indicates that state equalized value will fall further, resulting in reduced taxable value for residential property. To select growth rates of the uncapping of taxable value due to home sales, Ms. Sallee employed a modeling exercise using historical data on the number of existing home sales and the difference between current taxable value of homes purchased 5, 10, and 15 years ago compared to a re-setting of taxable value equal to 50% of true cash value. The forecast assumes a reduction in residential taxable value of between -2% and -4% per year between FY 2016 and FY 2020.

**Figure 2. Percentage Change in Average Sale Price, Residential Taxable Value, and Residential State Equalized Value in Detroit, 2007-2014 (Indexed to 2007)**



- 4) The City completed reassessments for some neighborhoods for tax year 2014 (FY 2015). The result is that residential taxable value declined -20.5% between FY 2014 and FY 2015. The City is also contracting with a company to perform a reappraisal study of all property in Detroit. Based on conversations with the City, Ms. Sallee assumed that the study would take 3-5 years, with changes to the taxable value of property appearing in FY 2020. She assumed a 15% drop in residential taxable value in FY 2020 as a result of the study.

This would bring residential taxable value to approximately half of its FY 2013 level. The value of residential property is expected to stabilize after the reappraisal study is complete. Based on historical data showing how the City came out of past recessions, the evidence does not support a quick rebound.

iii. Taxable Values: Commercial Property

- a) Ms. Sallee forecasted commercial taxable value to decline 7% between FY 2013 and FY 2023 with real property taxable value -8% and personal property taxable value -6%.
- b) Ms. Sallee assumed a continued decline of commercial taxable value of 1- 2% per year until FY 2018. This continues the trend of -2% per year average decline in commercial taxable value between 2008 and 2013 using ad valorem warrant taxable value data from the State Tax Commission and the City of Detroit.
- c) Commercial real property performed better than industrial real property during and after the recent recession (2008-2013), losing a smaller percentage of taxable value than industrial real property. Ms. Sallee assumed that losses to commercial property would end by FY 2018 and there would be slight recovery post FY 2018 in line with other

assumptions related to employment and population stabilization in the City in later years of the forecast period.

d) Ms. Sallee assumed population decline in the City of -1.3% per year (CAGR) between 2010 and 2020 and a decline in City employment of -1% between 2013 and 2020. Ms. Sallee also took into account the major commercial and industrial taxpayers and their share of taxable value to inform the likely impact to taxable value if a large taxpayer were to leave the City of Detroit.

iv. Taxable Values: Industrial Property

- a) Ms. Sallee forecasted that industrial taxable value will decline 12% between FY 2013 and FY 2023, with real property taxable value declining 11% and personal property 14%.
- b) Ms. Sallee assumed continued decline of taxable value of between -1% and -2% between FY 2016 and FY 2018, continuing recent trends and following the long-run trend of reductions to industrial real property of -1% between 2000 and 2013.
- c) Industrial personal property taxable values have varied substantially year-to-year.
- d) Ms. Sallee assumed a slower decline for industrial personal property compared to real industrial property given the overall growth in the

former. However, much of the industrial personal property qualifies for a Renaissance Zone exemption.

- e) Since industrial property, both real and personal, has performed worse than commercial property and historically has taken longer to recover, Ms. Sallee assumed that industrial property taxable value would continue to decline through FY 2021.

v. Taxable Values: Utility Property

- a) Ms. Sallee assumed that utility personal property would increase during the forecast period, following recent trends.
- b) Ms. Sallee applied 0% and 0.5% growth rates post-FY 2015 based on recent fluctuations in utility property taxable values. For example, in tax years 2011 and 2013, personal property taxable values fell, but in tax years 2012 and 2014, taxable values increased.

vi. Renaissance Zone

- a) The Renaissance Zone comprises primarily commercial and industrial property, with a small amount of residential and utility property. The classification of Renaissance Zone property fluctuates on a year-to-year basis.
- b) In FY 2015, 11% of the property in the City was classified as Renaissance Zone (\$809mm out of \$7.3b). Of the 11% classified as

Renaissance Zone property, 29% is real property and 71% is personal property.

vii. Tax Rate

- a) Ms. Sallee assumed that the City's tax rates will remain constant until 2053.
- b) The City's tax rate on property of 19.952/1000 is near the legal limit of 20/1000 and is among the highest in the State of Michigan.

viii. Adjustments for Upcoming Legal Changes

- a) If voters approve the plan to repeal personal property taxes on certain commercial and industrial property in August of 2014, the phase-out would begin in FY2015, with the exemption of commercial and industrial personal property owned by a single taxpayer if the taxable value of the property is less than \$40,000.
- b) Ms. Sallee has modeled a 50% chance of voters approving the repeal of personal property taxes.
- c) According to estimates from the Michigan Senate Fiscal Agency, if voters approve the repeal, it is likely that 20% of the property tax revenue from industrial and commercial property will not be replaced by a new funding mechanism. Ms. Sallee has modeled this uncertainty as an

expected 10% decline in revenue from these personal property taxes for each year between FY 2015 and 2023.

- d) If the voters do not approve the plan, the change in the forecasts would be de minimis.

ix. Effective Collections Rate

- a) Ms. Sallee estimated the City's effective collections rate after a review of the City's historical collections rates on non-delinquent property by property class for FY 2007 – FY 2011. Using this information, Ms. Sallee selected non-delinquent collection rates of approximately 50% for residential property, 83% for commercial property, 87% for industrial property, and 100% for utility property during the forecast period of FY 2015 to FY 2020. This came to a blended rate of 65-70%.
- b) Residential property accounts for approximately half of the City's taxable value.
- c) Ms. Sallee also relied upon the City's calculation of net revolving fund payments between the City and Wayne County. Using this information, Ms. Sallee assumed net payments from Wayne County on delinquent property between 12-15% of the tax levy during the forecast period.
- d) The effective collections rate is assumed to be 80% in FY 2015 – FY 2019. This is similar to the effective collections rate in recent years

of 80% (2011) and 83% (2012) reported in the City of Detroit's 2012 Comprehensive Annual Financial Report (CAFR).

- e) Ms. Sallee assumed that the mass reappraisal study would be completed by FY 2020 and that the City would have a higher collections rate of 84% after that time. This improvement is due to residential non-delinquent collections rate increasing from 50% to 70%.

## B. Impact of Reinvestment

- i. Ms. Sallee forecasted that planned City reinvestments would have a modest impact on tax revenues. The reinvestments that will impact tax revenues are improved collections of tax revenues and slightly better growth in taxable value compared to the baseline.
- ii. Ms. Sallee assumed higher collections rates because of slight improvements in commercial and industrial collections rates and improvements to residential collections rates. These would return the City to pre-recession collections rates on residential property by FY 2017. The collections rate is assumed to be 82% in FY 2017 – FY 2019, and 87% after the mass reappraisal study is complete.
- iii. Commercial and industrial taxable values are also modeled to show slight additions to taxable value (1%) beginning in FY 2017 for both.

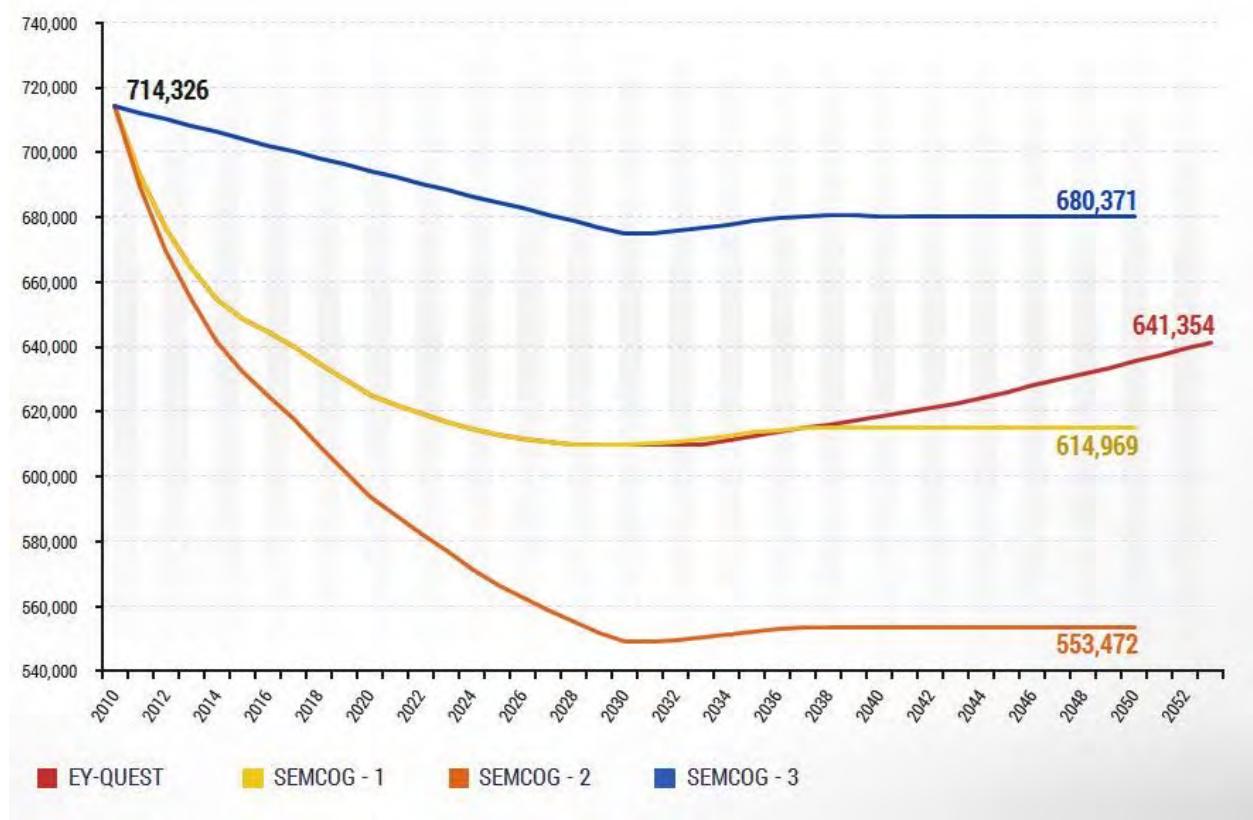
## **40-Year Forecast**

Ms. Sallee extrapolated property tax revenues from FY 2023 to FY 2053. In the 40-Year Forecast of property taxes, Ms. Sallee made the following assumptions.

### A. Population

- i. The City's population will continue to decline from FY 2024 until 2029.
  - a) Ms. Sallee based this assumption on Scenario 1a of the Southeast Michigan Council of Governments' population forecasts.
- ii. Ms. Sallee forecasted that there will be no population growth from 2029 until 2033, 0.2% annual population growth from 2034 until 2043, and 0.3% annual population growth from 2044 until 2053.
  - a) Ms. Sallee based these assumptions on an examination of population trends in comparable metropolitan areas that experienced a decade or more of declining population, as well as the Detroit metropolitan area's growth from 1990 and 2000.
  - b) These population forecasts estimate that the population in the City of Detroit will be greater by 3.4% than the SEMCOG scenario 1a forecasts. Ms. Sallee made this assumption because SEMCOG's population forecast was completed before the Plan of Adjustment, which provides for improvements in City services and operations. *See Figure 3.*

**Figure 3. E&Y and SEMCOG Population Forecasts  
for the City of Detroit (2010-2053)**



## B. Taxable Property Growth Rates

- i. The citywide mass reappraisal study (projected to be included in the FY 2020 tax bills) will result in a decline in the taxable value of property in the City. After that, Ms. Sallee assumed that the value of property in the City in FY 2024 and FY 2025 would increase at a rate of 3.4% growth. This assumption is in line with national trends of growth in existing home prices of 3.3% projected by the Congressional Budget Office in 2022 and 2023.

- ii. Annual growth in general operating property tax revenues is projected to fall to 2% in years 2030-2033 and then average a 1.5% annual growth rate in the following years. Ms. Sallee selected these rates to reflect the business cycle and her assumption that the City would have slower growth than the rest of the nation.
- iii. This 1.5% rate is slightly better than the average annual 1.1% growth rate in Detroit between 2000 and 2013. Ms. Sallee completed an analysis of annual average growth of taxable value using ad valorem warrant information from the State Tax Commission.

### **State Revenue Sharing**

#### **I. Methodology**

In reaching her opinions, Ms. Sallee used the following methodology:

- A. Constitutional Revenue Sharing
  - i. Ms. Sallee forecasted constitutional revenue sharing based on the applicable formula, which takes into account the population by cities, villages, and townships, and the sales tax growth of the state. The amount of available constitutional revenue sharing payments is fixed at 15.0% of gross collections of the state sales tax collected at a 4.0% rate and is distributed to cities, villages, and townships on a per capita basis.

- ii. Ms. Sallee used constitutional revenue sharing amounts forecasted by the Michigan Treasury for the City of Detroit for FY 2016 to FY 2025.
- iii. For years after FY 2025, Ms. Sallee estimated constitutional revenue sharing based on forecasted average increases in revenues of between 2% and 3%. After each Census, she adjusted the constitutional payment based on population changes. Ms. Sallee forecasted constitutional payments falling with declining population.

#### B. Economic Vitality Incentive Payments (EVIP)

- i. EVIP payments that the City receives are based on the amount appropriated by the Legislature on a year-to-year basis. Ms. Sallee considered that the appropriations could be reduced, increased, or eliminated at any point. For example, statutory and incentive payments (EVIP) increased 17% between FY 2010 and FY 2011 before declining 24% in the next fiscal year. There is no set formula for EVIP payments for the City of Detroit.
- ii. Ms. Sallee's forecast follows current law and uses FY 2015 EVIP payments for all years after FY 2015.

### **II. Assumptions**

Documents and other materials supporting Ms. Sallee's opinions have been or will be produced by the City. In addition, certain of the assumptions underlying

Ms. Sallee's analysis and opinions are set forth in the 10-Year and 40-Year Forecasts. Ms. Sallee also made the following assumptions.

#### A. Constitutional Revenue Sharing Payments

- i. The amount of constitutional revenue sharing payments is fixed at 15.0% of gross collections of the state sales tax collected at a 4.0% rate and is distributed to cities, villages, and townships on a per capita basis. This stream of payments is protected by Article IX, Section 10 of the Michigan Constitution. Ms. Sallee assumes that these percentages will not change during the forecast period.
- ii. The 10-Year Forecast includes the Legislature-approved FY 2015 revenue sharing payments for Detroit.
- iii. For years FY 2015 – FY 2025, the forecast uses projected constitutional revenue sharing payments completed by the Office of Revenue and Tax Analysis of the Michigan Department of Treasury.
- iv. Constitutional revenue sharing payments follow expected trends in sales tax growth. The forecast assumes between 2% and 3% sales tax growth for the forecast period.
- v. For those years following a decennial census, there are adjustments based on the projected population for the City of Detroit.

- vi. Ms. Sallee used the SEMCOG population forecast for Detroit between 2020 and 2029, with zero growth between 2029 and 2030. Using SEMCOG's forecast, Ms. Sallee assumed that Detroit's population will decline by 2.4% between 2020 and 2030, but she forecasts that the impact on constitutional revenue sharing will be -1%.
- vii. Modest growth in Detroit's population between 2030 and 2040 will result in an increase in constitutional payments of 1.4% between 2040 and 2041, and 1.7% between 2050 and 2051.

## B. EVIP Payments

- i. Ms. Sallee assumed that the amount of annual EVIP payments will remain constant at the current law FY 2015 amount of \$140 million. This follows standard forecasting procedures and reflects the variable nature of the EVIP payments.
- ii. The amount of EVIP payments is determined each year by the Legislature. Over the past decade, the Legislature has appropriated non-constitutional revenue sharing for cities, villages, and townships at less than full funding.

## EXHIBITS

Attached as Exhibit A are exhibits Ms. Sallee will use to summarize or support her opinions.

## **DOCUMENTS AND OTHER MATERIALS CONSIDERED IN REACHING OPINIONS**

Attached as Exhibit B is a listing of documents and other materials Ms. Sallee considered in reaching her opinions. Ms. Sallee also considered discussions with City and State employees, as well as the City's third-party consultants and contractors. Ms. Sallee likewise had available to her the expertise of Gaurav Malhotra and Robert Cline, along with the materials they considered.

### **QUALIFICATIONS**

Ms. Sallee's curriculum vitae is appended as Exhibit C.

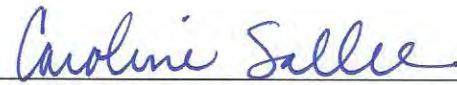
### **PRIOR EXPERT TESTIMONY**

Ms. Sallee has not previously testified as an expert.

### **COMPENSATION**

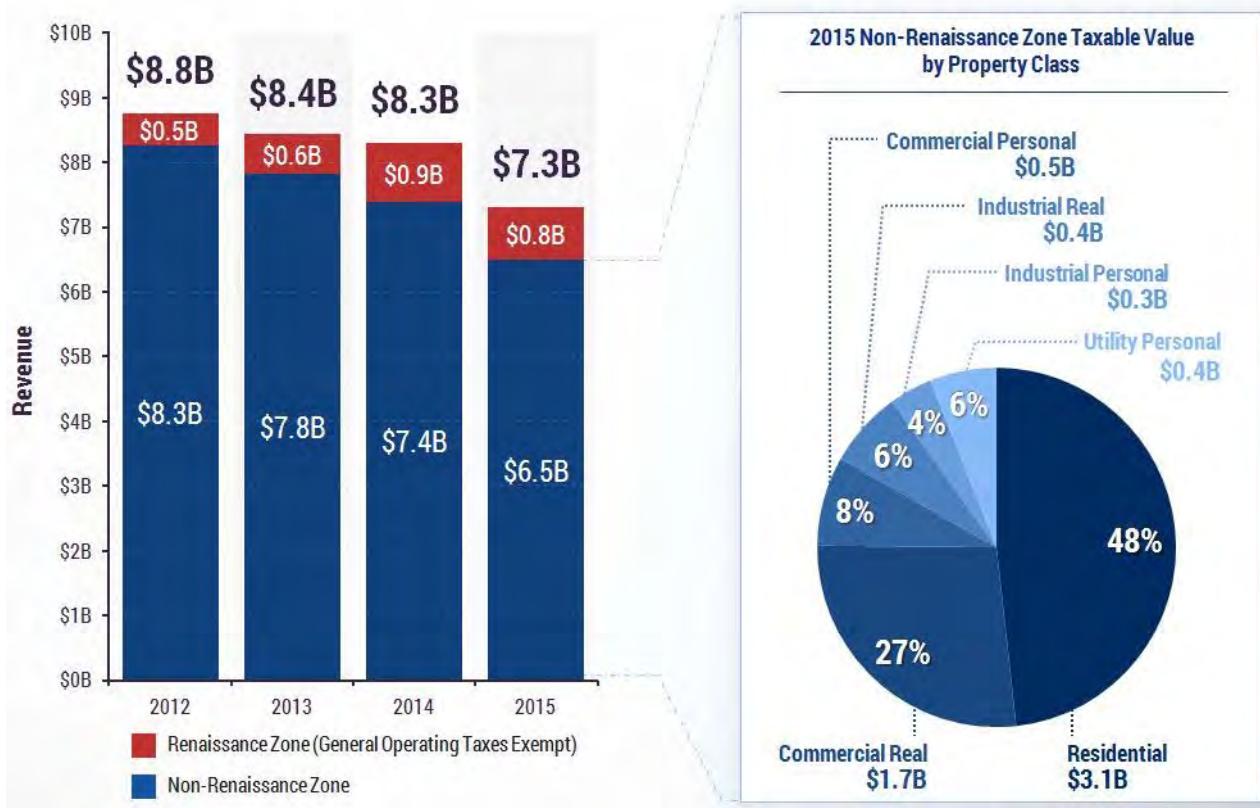
Jones Day retained Ernst & Young LLP on behalf of the City to provide expert witness services to the City in connection with *In re City of Detroit, Michigan*, Case No. 13-53846 (Bankr. E.D. Mich.) (Rhodes, J.). The City compensates Ernst & Young LLP at an hourly rate of \$550 for actual time incurred by Ms. Sallee, as well as reasonable out-of-pocket expenses. These fees are subject to a 10% hold-back contingent on plan confirmation by December 31, 2014.

Dated: July 8, 2014

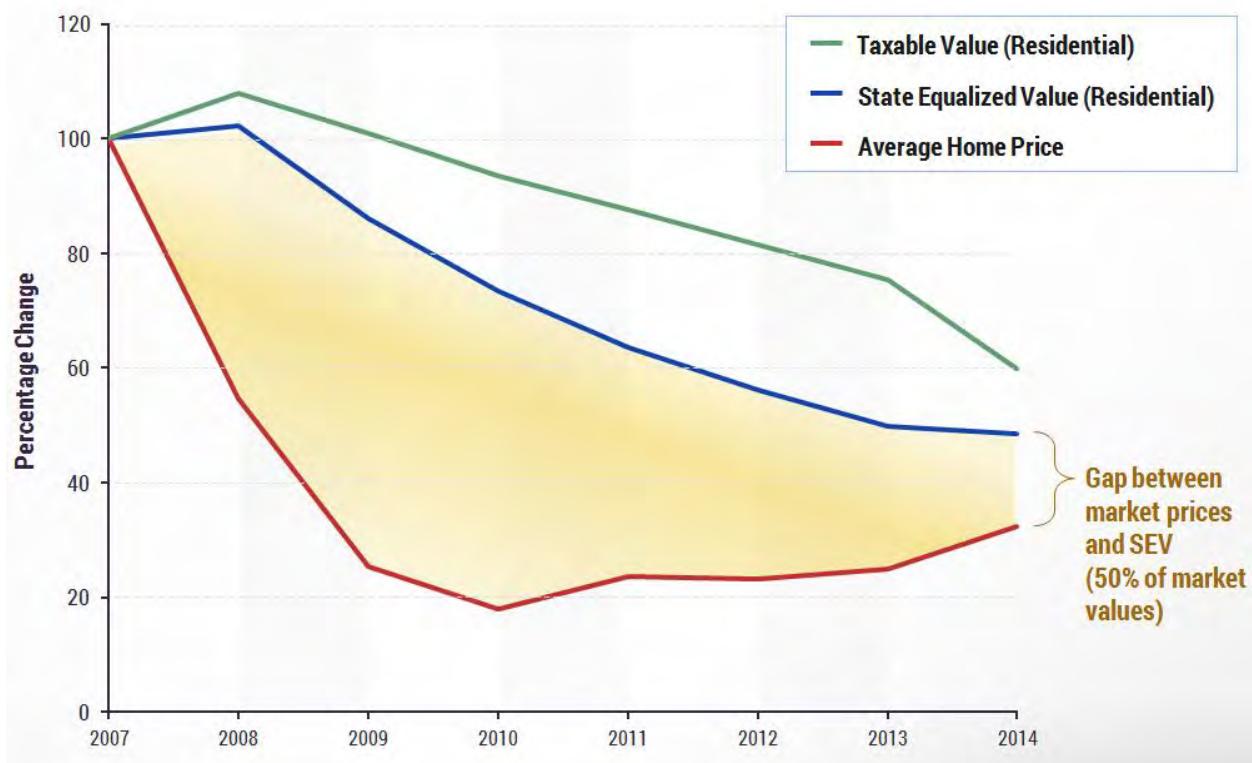
  
\_\_\_\_\_  
Caroline Sallee

# **EXHIBIT A**

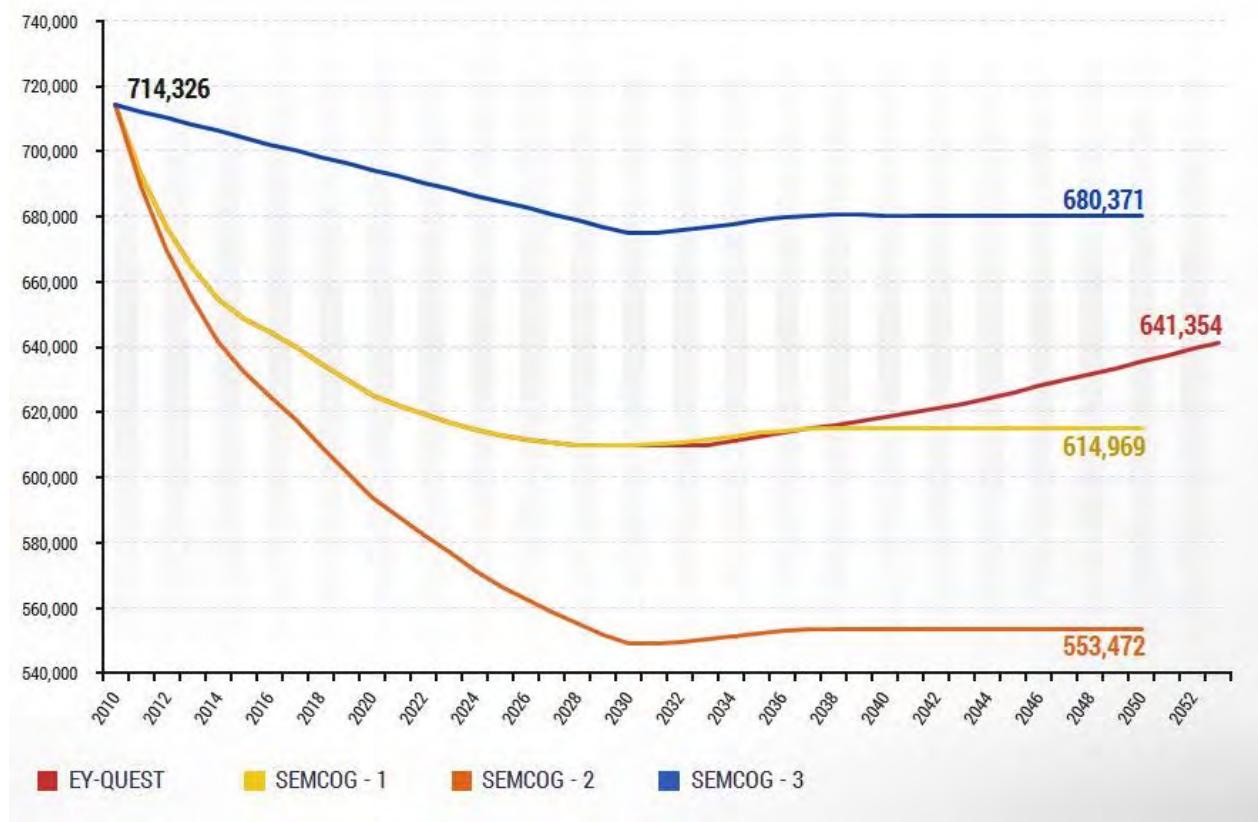
**Figure 1. Total Taxable Value for City of Detroit, FY 2012 – FY 2015**



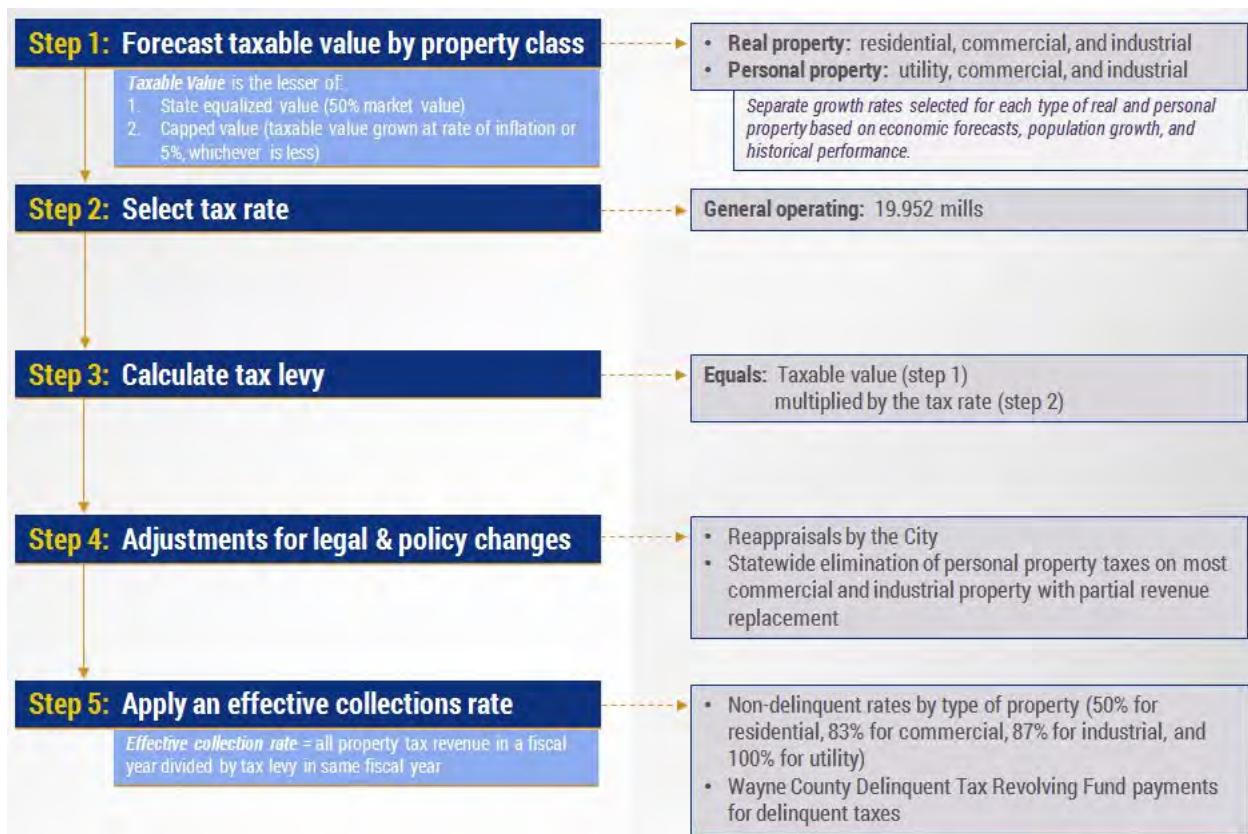
**Figure 2. Percentage Change in Average Sale Price, Residential Taxable Value, and Residential State Equalized Value in Detroit, 2007-2014  
(Indexed to 2007)**



**Figure 3. E&Y and SEMCOG Population Forecasts  
for the City of Detroit (2010-2053)**



**Figure 4. Steps to Forecasting Detroit General Operating Property Taxes**



## **EXHIBIT B**

## **List of Documents and Other Materials Considered**

1. Ad Valorem State Tax Commission Assessment Roll Certification L-4037 (Board of Review) and Ad Valorem Warrant L-4022, City of Detroit, Tax Years 2011-2013, *available at* POA00535796 – POA00535804, POA00629611 – POA00629617, POA00629622 – POA00629623.
2. Ad Valorem Parcels Minus Renaissance Zone, Miscellaneous Totals, City of Detroit, Tax Year 2014, *available at* POA00706439 – POA00706447.
3. Case-Shiller Home Price Index for Detroit, Michigan, Federal Reserve Bank of St. Louis, Economic Research Division (1991-Apr. 2014), *available at* <http://research.stlouisfed.org/fred2>.
4. Citizens Research Council of Michigan, Detroit City Government Revenues (Apr. 2013), *available at* POA00111072 – POA00111133.
5. City of Detroit 2011-2012 Executive Budget Summary, Section C, *available at* [http://www.detroitmi.gov/Portals/0/docs/budgetdept/2011-12%20Budget/2011-2012%20Executive%20Budget%20Summary/EBS\\_Section%20C%20Summary%20General%20Fund\\_2011\\_2012.pdf](http://www.detroitmi.gov/Portals/0/docs/budgetdept/2011-12%20Budget/2011-2012%20Executive%20Budget%20Summary/EBS_Section%20C%20Summary%20General%20Fund_2011_2012.pdf).
6. City of Detroit 2012-2013 Budget, Ad Valorem Property Valuations, Tax Levies, and Tax Rates, *available at* POA00535773.
7. City of Detroit 2013-2014 Executive Budget Summary, Section B, *available at* [http://www.detroitmi.gov/Portals/0/docs/budgetdept/2013-14\\_Budget/Budget%20Summary\\_14/EBS\\_Section%20B\\_Summary%20All%20Funds\\_2013\\_2014\\_stamped.pdf](http://www.detroitmi.gov/Portals/0/docs/budgetdept/2013-14_Budget/Budget%20Summary_14/EBS_Section%20B_Summary%20All%20Funds_2013_2014_stamped.pdf).
8. City of Detroit, Ten-Year Financial Projections (July 2, 2014), *available at* POA00706519 – POA00706600.
9. City of Detroit, Ten-Year Plan of Adjustment, Restructuring and Reinvestment Initiatives (July 2, 2014), *available at* POA00706449 – POA00706518.
10. City of Detroit, Plan of Adjustment – 40-Year Projections (July 2, 2014), *available at* POA00706603 – POA00706611.
11. City of Detroit, Property Tax Collection Summaries by Class (2007-2011), *available at* POA00545716 – POA00545721.

12. City of Detroit, Renaissance Zone Taxable Values (2012-2013), *available at* POA00275527, POA00535838, POA00535853.
13. City of Detroit, *Revenue Consensus Conference Final Report*, Feb. 7, 2013, *available at* POA00650840 – POA00650847.
14. Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2013 to 2023* (Feb. 2013), *available at* <http://www.cbo.gov/sites/default/files/cbofiles/attachments/43907-BudgetOutlook.pdf>.
15. Data Sources, *available at* POA00275527.
16. David Zin, Chief Economist, *Personal Property Tax Reform Legislation*, State Notes (Winter 2013), *available at* <http://www.senate.michigan.gov/sfa/publications%5Cnotes%5C2013notes%5Cnoteswin13dz.pdf>.
17. Fourth Amended Disclosure Statement to the City's Plan of Adjustment, Exhibits J-K.
18. FY 2012 City of Detroit Comprehensive Annual Financial Report (CAFR), Revenue Capacity—Property Tax Levies and Collections, *available at* POA00272832 – POA00272833.
19. FY 2012 City of Detroit Comprehensive Annual Financial Report (CAFR), Revenue Capacity—Principal Property Tax Payers, *available at* POA00275527 and POA00272830 – POA00272831.
20. House Fiscal Agency, *Economic Outlook and Revenue Estimates for Michigan*, (May 2013, Jan. 2014, May 2014), *available at* <http://www.house.michigan.gov/hfa/revenue.asp>.
21. House Fiscal Agency, *Economic Vitality Incentive Program* (July 23, 2013), *available at* POA00536036 – POA00536079.
22. Memorandum, Changes to Detroit Property Tax Forecasts, *available at* POA00275524.
23. Memorandum, Changes to Detroit Property Tax Forecasts Since June 2013, QUEST (Feb. 24, 2014), *available at* POA00275525 – POA00275526.

24. Memorandum, Detroit Revenue Extrapolation—2024-2053 (Jan. 8, 2014), *available at* POA00536026 – POA00536028.
25. Memorandum, Estimating Methodology, Detroit Tax Forecast, *available at* POA00535987 – POA00535993, POA00707083 – POA00707088.
26. Memorandum, Long-Term Projections Discussion Items, *available at* POA00275657 – POA00275660.
27. Memorandum, Property Tax, *available at* POA00275537.
28. Memorandum, Property Tax Revenue Methodology—High-Level (May 21, 2014), *available at* POA00707089 – POA00707090.
29. Michigan Association of Realtors, Detroit Board of Realtors Residential Sales Statistics, 1995, 1998, 2001-2013, *available at* POA00275527 and <http://www.mirealtors.com/Housing-Statistics>.
30. Michigan Compiled Laws § 211.27a(1).
31. Michigan Constitution, Article 9, §§ 3, 10.
32. Michigan Public Act 246 of 2003.
33. Michigan State Tax Commission, Taxable Valuation (2000-2012), *available at* [http://www.michigan.gov/treasury/0,1607,7-121-1751\\_2228\\_21957\\_45819---,00.html](http://www.michigan.gov/treasury/0,1607,7-121-1751_2228_21957_45819---,00.html).
34. Michigan State Tax Commission, Assessed & Equalized Valuation (2000-2012), *available at* [http://www.michigan.gov/treasury/0,1607,7-121-1751\\_2228\\_21957\\_45818---,00.html](http://www.michigan.gov/treasury/0,1607,7-121-1751_2228_21957_45818---,00.html).
35. Miller Canfield, Office Memorandum, Real Property Tax Collection and Enforcement in the City of Detroit (Apr. 23, 2014), *available at* POA00252071 –POA00252086.
36. Office of Revenue and Tax Analysis, Michigan Department of Treasury, *2012/2013 Millage Rate Comparison – County and Local Unit Report* (Apr. 29, 2014), *available at* [http://www.michigan.gov/documents/taxes/20122013LocalUnitMillageReport\\_20140429\\_454855\\_7.pdf](http://www.michigan.gov/documents/taxes/20122013LocalUnitMillageReport_20140429_454855_7.pdf).

37. Office of Revenue and Tax Analysis, Michigan Department of Treasury, *Michigan Sales Tax, Constitutional Revenue Sharing and City of Detroit Revenue Sharing Projections to FY2025*, available at POA00629605 – POA00629606.
38. Office of the Wayne County Treasurer, City of Detroit, Revolving Fund Net Payment Summary, FY 2005-FY 2013, available at POA00275534 and POA00706429 –POA706438.
39. Plante Moran, *Michigan Personal Property Tax Changes* (Mar. 2014), available at POA00629649 –POA00629650.
40. Rebecca Ross, *Consensus Revenue Estimating: The Process*, Fiscal Forum (Apr. 2001), available at <http://www.house.mi.gov/hfa/Archives/PDF/consens.pdf>.
41. Report of Gaurav Malhotra.
42. Report of Robert Cline.
43. Southeast Michigan Council of Governments, Forecasts for Population and Employment Change, Scenario 1a (2012), available at POA00225109.
44. U.S. Bureau of the Census, Building Permits Survey for Wayne County, Michigan (1998-2013), available at POA00275527 and <http://www.census.gov/construction/bps/>.
45. U.S. Bureau of Census, Housing Starts for Wayne County (1998-2012), available at POA00275527 and <http://www.census.gov/construction/bps/>.
46. U.S. Census Bureau, *Statistical Abstract of the United States: 2012*, Table 20: Large Metropolitan Statistical Areas—Population: 1990 to 2010, available at <http://www.census.gov/prod/2011pubs/12statab/pop.pdf>.
47. William H. Frey, *Population Growth in Metro America Since 1980: Putting the Volatile 2000s in Perspective*, Metropolitan Policy Program at Brookings (Mar. 2012), available at [http://www.brookings.edu/~/media/research/files/papers/2012/3/20%20population%20frey/0320\\_population\\_frey.pdf](http://www.brookings.edu/~/media/research/files/papers/2012/3/20%20population%20frey/0320_population_frey.pdf).

# **EXHIBIT C**

# Caroline M. Sallee

**Ernst & Young, LLP**

Quantitative Economics and Statistics

Phone: 312-879-4443

caroline.sallee@ey.com

## **EDUCATION**

### **University of Michigan**

Gerald R. Ford School of Public Policy, Master of Public Policy, April 2005

Coursework: Advanced Microeconomics, Macroeconomics, Public Finance, Econometrics, Valuation

Ann Arbor, MI

### **Augustana College**

Bachelor of Arts in Economics and History, May 2002

Honors: Summa cum laude, Phi Beta Kappa

Rock Island, IL

## **WORK EXPERIENCE**

### **Ernst & Young LLP, August 2012 – Present**

Chicago, IL

*Manager, Quantitative Economics & Statistics (QUEST)*

- Manages projects involving economic impact analyses for public and private sector clients. Uses IMPLAN and REMI to model the direct, indirect, and induced impacts of proposed capital expenditures and current operations.
- Manages tax policy projects. Works with public and private sector clients, trade associations, and business coalitions to develop and analyze regulatory and tax policy changes, and tax forecasting.
- Works with clients to analyze the public rates of return on investments in state economic development and workforce programs. Oversees staff work on these projects.
- Author of Ernst & Young's annual *50-State Total State and Local Business Taxes* study published with the Council On State Taxation in 2013.

### **Anderson Economic Group, LLC, June 2005 – July 2012**

Chicago, IL

*Director of Public Policy and Economic Analysis*, September 2010-Present

- Managed the practice area, which included creating and following a business plan for the practice area, hiring, overseeing all project staffing and reports released, and completing monthly invoicing.
- Obtained business for the practice area, which included responding to "Request for Proposals," writing engagement letters, meeting with prospective clients, and interviewing for projects.
- Served as project manager for economic impact, fiscal impact, tax policy, and health care finance reports for public and private clients. Tasks performed as project manager include: preparing contract, managing project budget, supervising staff work, preparing analysis, writing report, and presenting findings to client.
- Developed economic models using Excel and Stata.
- Served on company's Management Advisory Council, which advised CEO on management and policy issues.
- Discussed report findings with press, including radio and television interviews.

*Consultant, July 2007-2010*

*Senior Analyst, June 2005-2007*

### **Government Accountability Office, May - August 2004**

Washington, DC

*Summer Intern in Education, Workforce, and Income Security Team*

- Wrote a section of the GAO's report to Congress that evaluated the U.S. Commission on Civil Rights' management practices and compliance with the Government Performance and Results Act.
- Analyzed data for a final report to Congress on the presence and display of social security numbers in public documents.

### **Hábitus: Investigación de Mercados y Opinión, January - July, 2003**

Quito, Ecuador

*Market Analyst*

- Created market research presentations for companies including Coca-Cola and Bell South.
- Analyzed survey data and designed presentations for clients.

### **Congressman Bill Luther's District Office, August - December, 2002**

Woodbury, MN

*Citizen Services Representative*

- Managed outreach project that entailed sending three detailed legislative letters to 1500 households each week.
- Composed press releases and Letters to the Editor that appeared in local papers on behalf of Congressman.

## **PUBLISHED REPORTS**

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### **Public reports with Ernst & Young, LLP**

“Total state and local business taxes: State-by-state estimates for fiscal year 2012,” with Andrew Phillips, Robert Cline, Michelle Klassen and Daniel Sufranski, July 2013.

### **Public reports with Anderson Economic Group, LLC**

“Review of Kentucky’s Economic Development Incentives,’ with Jason Horwitz, Alex Rosaen, and Colby Spencer, 2012.  
“Benchmarking Michigan’s URC,” with Erin Grover and Colby Spencer, 2012.  
“The URC’s Contributions to Automotive Innovation,” with Alex Rosaen and Erin Grover, 2012.  
“Economic Benefits Study: Contributions of CVS Caremark to Michigan’s Economy,” with Jason Horwitz, 2012.  
“Life Sciences Industry in Michigan and the University Research Corridor,” with Hillary Doe and Patrick Anderson, 2009.  
“The Role of MQC3 and Home Help,” 2011.  
“The URC’s Support for Information and Communication Technology in Michigan,” with Erin Agemy, 2011.  
“University Research Corridor Annual Report, with Patrick Anderson, 2011.  
“The Economic Impact of Argonne National Laboratory,” with Scott Watkins and Alex Rosaen, 2011.  
“The Economic Impact of Fermi National Accelerator Laboratory,” with Scott Watkins and Alex Rosaen, 2011.  
“Costs and Benefits of Investing in Mental Health Services in Michigan,” with Erin Agemy, 2011.  
“Building a New Bridge in Detroit: A Study Evaluating the Options” with Colby Spencer and Alex Rosaen, September 2011.  
“Dollars and Sense: How State and Local Governments in Michigan Spend Your Money,” January 2011.  
“Research and Development in the URC,” with Erin Agemy, 2010. “The URC’s Support for Advanced Manufacturing in Michigan,” with Erin Agemy and Alex Rosaen, 2010.  
“Empowering Michigan: Fourth Annual Economic Impact Report of Michigan’s University Research Corridor,” with Patrick Anderson, 2010.  
“Preliminary Report: Life Sciences Industry in Michigan and the University Research Corridor,” with Hillary Doe and Patrick Anderson, 2009.  
“Michigan’s University Research Corridor: Third Annual Economic Impact Report,” with Patrick Anderson, 2009.  
“2008 State Business Tax Burden Rankings,” with Patrick Anderson, 2009.  
“Economic Benefits of the Earned Income Tax Credit in Michigan,” 2009.  
“A Hand up for Michigan Workers: Michigan’s State Earned Income Tax Credit,” with Patrick Anderson and Alex Rosaen, 2008.  
“Economic Impact of Proposed MSU Facility for Rare Isotope Beams (FRIB),” with Patrick Anderson, 2008.  
“Preliminary Report: Alternative Energy Research and Development in the URC,” with Rebecca Cohen and Patrick Anderson, 2008.  
“Michigan’s University Research Corridor: Second Annual Economic Impact Report,” with Patrick Anderson, 2008  
“Tax Burden and Distribution of Stimulus Payments,” with Patrick Anderson, 2008  
“2007 State Business Tax Burden Rankings,” with Patrick Anderson, April 2008.  
“Economic and Fiscal Impact of LaSalle Bank Acquisition,” with Alex Rosaen, Darci Keyes, and Tim Mahon, 2007.  
“Business Tax Burdens in Illinois” with Tim Mahon, June 2007.  
“Michigan’s University Research Corridor: First Annual Economic Impact Report,” with Patrick Anderson, 2007.  
“Economic Impact of Big Ten Football Games in Michigan, with Scott Watkins and Patrick Anderson, 2007.  
“Economic Impact of Michigan State University, with Alex Rosaen and Patrick Anderson, 2007.  
“Role of Blue Cross in Michigan’s Health Insurance Market,” with Darci Keyes and Patrick Anderson, 2007. “Benchmarking for Success: A Comparison of State Infrastructure,” with Patrick Anderson, December 2006.  
“Benchmarking for Success: Education Performance Among the States,” with Scott Watkins and Patrick Anderson, September 2006.  
“Benchmarking for Success: A Comparison of State Business Taxes,” with Patrick Anderson, August 2006.  
“Costs and Benefits of a Wage Increase for Home Help Workers,” with Alex Rosaen, 2006.  
“Review of the Proposed K-16 Initiated Law,” with Alex Rosaen and Patrick Anderson, 2006.  
“Automation Alley Annual Technology Industry Report: Driving Southeast Michigan Forward,” with Scott Watkins, 2006.  
“North-Central West Virginia’s Technology Industry: A Pathway Through the 21st Century,” with Scott Watkins, 2006  
“Likely Impact of Delphi Bankruptcy,” AEG Working Paper, with Ilhan Geckil and Patrick Anderson, 2005.

## **SELECT PRESENTATIONS**

---

“Common Sense Reforms for a New Michigan,” leadership summit presentation on “2011 Citizen’s Guide to Michigan’s Financial Health” with Michigan Governor Rick Snyder, January 2011.

“Review of Kentucky’s Economic Development Incentive Programs,” presentation to the Kentucky Interim Joint Committee on Economic Development and Tourism with Jason Horwitz, July 19, 2012.

# **EXHIBIT 2**

**UNITED STATES BANKRUPTCY COURT  
FOR THE EASTERN DISTRICT OF MICHIGAN**

**City of Detroit, Michigan, Debtor**

**Chapter 9**

**Case No. 13-53846**

**EXPERT REPORT OF DR. GLENN MEYERS**

**July 25, 2014**

## CONTENTS

SCOPE AND SUMMARY FINDINGS.....	3
QUALIFICATIONS.....	5
COMPENSATION.....	6
REVENUE FORECASTING.....	7
The City's Forecasts: Background.....	7
The City's Property Tax Revenue Forecast.....	12
Contrary Trends.....	17
The FY 2014 Reassessment.....	32
The Sallee Report.....	33
FTI's Forecasts.....	35
The City's Income Tax Revenue Forecast .....	41
Revenue Sharing.....	44
Other Revenue .....	45
The City's Own Assessment.....	47
POTENTIAL TAX MEASURES.....	48
Guidance in Setting Rates.....	48
Ten-Year Property Tax Increase.....	48
Inbound Commuter Tax.....	54
EFFECTS OF HYPOTHESIZED TAX MEASURES ON THE CITY'S ECONOMIC PROSPECTS.....	55
ADDED REVENUE FROM CORRECTED PROPERTY TAX REVENUE FORECAST AND HYPOTHESIZED TAX MEASURES.....	58
ADDED REVENUE FROM IMMEDIATE REINVESTMENT STIMULUS ....	58
EXHIBITS.....	62
SCHEDULES.....	107
MATERIALS REVIEWED.....	128
APPENDIX A.....	141
CURRICULUM VITAE.....	146
PRIOR TESTIMONY & PUBLICATIONS.....	156

## SCOPE AND SUMMARY FINDINGS

1. I, Glenn D. Meyers, Ph.D., am a Managing Director at FTI Consulting, Inc., have been retained by counsel for Syncora Capital Assurance, Inc. and Syncora Guarantee, Inc. to, among other things:

1. Evaluate the City's ten-year forecasts, and offer alternatives as feasible;
2. Estimate the revenue yield and assess other economic features of various measures to increase revenue;
3. Evaluate the City's contention – apparently not supported by its experts – that, given the alleged economic effects of a tax increase and problems in collection, "...it would not be practical... to raise taxes at this time,"<sup>1</sup> and
4. Evaluate the opinions of the City's experts.

2. Subject to possible amendment to the extent that more information on the methodologies employed by the City's experts becomes available, my principal findings are:

1. The City's forecasts are an unreliable basis for evaluating future cash flows, either in a "baseline" case or the alternative "restructuring" scenario. Most obviously, the City's forecast of tax revenue lacks a firm foundation and likely understates future revenue by a large margin.
2. Contributing to this unreliability are inadequately documented and/or demonstrably false assumptions, non-transparent methods, and unschooled economic reasoning. Taken together and considered overall, the City's expert reports, report data sources, updated financial model, and Fourth Amended Disclosure fail to meet commonly accepted scientific standards of rigor, objectivity and disclosure.
3. Combined with alternative forecasts of property tax revenue, a ten-year property tax increase and a tax on inbound commuters could yield from \$1.0 to \$1.6 billion in incremental General Fund-related revenue from FY 2014 through FY 2023 above the City's forecasts, even if one disregards the immediate stimulative effect of proposed reinvestment on the City's economy (see table below).
4. The City's assumption that such tax measures as are contemplated here would have a substantial adverse effect on the local economy lacks a sound scientific basis.

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<sup>1</sup> Fourth Amended Disclosure Statement filed May 5, 2014, ("Disclosure Statement"), Document 4391, page 131 of 197.

<b>ESTIMATED INCREMENTAL GENERAL FUND REVENUE THROUGH FY 2023, EXCLUDING POTENTIAL ADDED INCOME TAX REVENUE</b>			
(Millions)			
<b>FORECASTING CORRECTION, PROPERTY TAX</b>	\$401.4 <sup>(*)</sup>	\$393.7 <sup>(**)</sup>	\$385.9 <sup>(***)</sup>
<b>TEN-YEAR GENERAL FUND PROPERTY TAX INCREASE, FY 2014 – FY 2023</b>	@38.9%	@51.8%	@64.8%
@ 75% Collection Rate (CR)	\$389.4	\$516.3	\$641.7
@ 85% Collection Rate (CR)	\$441.3	\$585.1	\$727.2
<b>INBOUND COMMUTER TAX, FY 2015 – FY 2023</b>	@\$147/yr.	@\$244/yr.	@\$342/yr.
	\$207.9	\$346.4	\$485.0
<b>TOTAL INCREMENTAL REVENUE RANGE</b>	<b>\$ 998.7 @ 75% CR</b>	<b>\$1,256.4 @ 75% CR</b>	<b>\$ 1,598.2 @ 85% CR</b>

(\*) Reflects estimated reduction in property values due to 38.9% increase in the property tax rate.  
(\*\*) Reflects estimated reduction in property values due to 51.8% increase in the property tax rate.  
(\*\*\*) Reflects estimated reduction in property values due to 64.8% increase in the property tax rate.

5. The City also fails to fully take into account other potential revenue sources and cost saving measures, such as the further privatization of City assets; the shifting of City responsibilities to other governmental entities; the potential for increased fees or other revenue-generating measures; increased grants from other governmental entities, private entities and other sources; and other actions that would increase the City's revenues going forward and/or reduce its costs.
6. Even if the City's forecasts were derived in the most diligent way, there would still be uncertainty in forecasting revenues and expenditures over the course of a ten-year period, as the City acknowledges.<sup>2</sup> Such long-

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<sup>2</sup> As the City notes in its Disclosure Statement, "The Projections are dependent upon the successful implementation of the City's budget and the reliability of other estimates and assumptions accompanying the Projections.... However, these estimates and assumptions may not be realized and are inherently subject to significant economic uncertainties and contingencies, many of which are beyond the City's control.... The Plan and the Projections underlying the Plan are based on certain assumptions about the City's future financial performance. Unforeseen events and circumstances may occur affecting the City's future financial performance, resulting in those assumptions proving inaccurate and the City being unable to fulfill its obligations under the Plan.

term forecasting of municipal revenue is not standard, nor did the City previously attempt it, to my knowledge. Indeed, the City's experts at Ernst & Young have been unable to identify any instance in which anyone attempted to forecast municipal revenues or expenses for a period as long as ten years,<sup>3</sup> Mr. Malhotra also acknowledging that future policy decisions affecting costs and revenues are a matter of speculation.<sup>4</sup> Rendering the task all the more difficult here is the fact that the decision-makers determining City policy will change over the course of this ten-year period. Accordingly, the City's conclusions are intrinsically unreliable, to a great degree.

7. Because it fails to develop an appropriate baseline cash flow model, the City offers no basis to conclude that creditors would be better off if the Plan of Adjustment were confirmed, as compared to an alternative scenario in which the City's bankruptcy petition is dismissed and its restructuring activities continued outside of Chapter 9.

## QUALIFICATIONS

3. I am an economist specializing in the application of economic, financial and statistical analysis to issues arising in commercial and labor disputes, regulatory policy formulation and enforcement, government finance, economic development, and corporate strategic planning. I have authored related studies, advised governments, and submitted expert testimony in federal court, state and county courts, arbitration and regulatory proceedings, and before the U.S. Senate.

4. In the area of government finance, I have evaluated the contemporaneous and projected financial condition of the City of New York, in the context of collective bargaining with City police; compensation of county police in Nassau County, N.Y. in the context of collective bargaining; employee costs of the City of San Bernardino, Cal., in the context of its bankruptcy proceeding; the impact of potential additional taxes on the economy of the City of Mammoth Lakes, Cal., in the context of a dispute with a creditor; the justification for, and cost of, set-aside programs for women- and minority-owned vendors contracting with the City of Newark, N.J., in a study conducted for the City; alternative forms of taxation and the problem of tax evasion, for the Commonwealth of Puerto Rico (CPR); and alternative forms of energy industry taxation, for the government of the Republic of Turkey.

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No guarantee can be made as to the City's future financial performance due to a variety of unforeseeable circumstances that may affect such performance." Disclosure Statement, Doc 4391, pages 97-98 of 197.

<sup>3</sup> Deposition of Gaurav Malhotra, July 15, 2014, page 41, lines 5-22, and 95, lines 12-22; Deposition of Robert Cline, July 14, 2014, page 9, line 24 through page 10, line 13.

<sup>4</sup> Deposition of Gaurav Malhotra, July 15, 2014, page 83, lines 11-22.

5. In the area of economic development, in addition to three years' work for the governments of Turkey and Israel advising on the development of energy markets in those countries, I have evaluated the employment effects of privatization of government enterprises in the CPR, devised appropriate transition strategies, and developed measures to enhance the international competitiveness of the Commonwealth's labor force and agricultural sector by addressing institutional factors impeding productivity growth. I conducted economic feasibility studies for Port Carteret (New Jersey) – one of largest product distribution centers in the United States – as well as adjacent docks and marinas and other commercial facilities; collaborated on a Master Plan for the development of Port of Galveston, Texas over twenty years; and co-authored a report for the New Jersey Business Roundtable addressing, *inter alia*, economic aspects of alternative State transport system development policies, as well as the State's 1988 Development and Redevelopment Plan overall.

6. In the course of my career, I have performed, contributed to, and/or evaluated hundreds of forecasts of economic and financial time-series, as well as numerous valuations of businesses and assets of all kinds, including residential, commercial, and industrial real property, and financial derivatives nominally based on property values. The latter work includes determination of appropriate construction cost escalation and contingency factors for estimation of the replacement cost of the World Trade Center. (*SR International Business Insurance Co., Ltd. v. World Trade Center Properties LLC et al and World Trade Center Properties LLC et al v. Allianz Insurance Company et al*, U.S. District Court for the Southern District of New York, Case No. 01 Civ. 12738 (JSM)).

7. I received my Ph.D. in economics, with Honors, at Columbia University, where I was a Herbert H. Lehman Fellow (concentration in the subjects of Industrial Organization and International Trade and Finance). I received my B.A. degree in economics, cum laude, at Columbia College. I have served on the adjunct faculties of Columbia University and Fordham University School of Law, and am a member of the American Economic Association.

## **COMPENSATION**

8. FTI Consulting, Inc. is being compensated for my work in this case at the rate of \$625 per hour. Others working under my direction in this matter are billed at rates ranging from \$305 to \$660 per hour. Our fees are not contingent upon my conclusions and opinion or upon the outcome of the subject litigation.

## REVENUE FORECASTING

### *The City's Forecasts: Background*

9. The City has provided two separate cash flow forecasts, a “baseline” forecast and what it calls its “restructuring” forecast. The restructuring forecast purports to reflect results should its proposed plan be confirmed. The “baseline” forecast reflects the offered opinions of the City’s consultants as to future financial results absent restructure.

10. However, the relevant economic comparison would be between a forecast for the City if its plan is confirmed and a forecast assuming its plan is dismissed, with restructuring efforts continued outside of Chapter 9.<sup>5</sup>

11. For the past sixteen months, the City has been under the control of an Emergency Manager endowed with significant powers to improve the City’s financial condition. As the City acknowledges, it has already undertaken a number of measures to cut expenditures and increase revenues. Moreover, it is implementing or planning additional measures that do not require confirmation of its Chapter 9 plan.

12. Not only has the Emergency Manager taken significant actions; even before, the City entered into a consent agreement with the State – the Financial Stability Agreement – which contemplated reforms such as public safety changes, changes to the public lighting department, changes to the Detroit Department of Transportation, changes to payroll systems, a new grants management system, new financial transactions system, demolition activities, changes to health care and pensions, human services department changes, employee training, new permitting and long-term liability restructuring.<sup>6</sup> The City and State embarked on a program to achieve both budget reductions and increased revenue: “The main issue facing city government is what is known as legacy costs... These

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<sup>5</sup> As the City notes on page 93 of 197 of its Disclosure Statement, Doc 4391: “To satisfy this ‘best interests of creditors’ test, a chapter 9 debtor must establish that confirmation of its proposed plan of adjustment ,more likely than not, would leave the debtor’s creditors in a better position than would dismissal of the debtor’s chapter 9 bankruptcy case.”

<sup>6</sup> Frequently Asked Questions: City of Detroit Financial Stability Agreement, page 3. Available at <http://msue.anr.msu.edu/uploads/files/Greening/MSUE-FSA-FAQ-4-9-12.pdf>. See also City of Detroit Office of Emergency Manager Kevyn D. Orr Financial and Operating Plan, May 12, 2013, page 21 (“Efforts to optimize the operations of the city were agreed to by Mayor Bing. For example, the Consent Agreement included a list of 21 categories of an Operational Reform Program and other operational initiatives. See, e.g., Consent Agreement, Annex B and Annex E. As a starting point for this Plan, the Emergency Manager has assumed that the Operational Reform Program outlined in the Consent Agreement will continue to serve as a useful guide for optimizing the City’s operations.”).

problems will have to be addressed through spending cuts or increasing revenue to fully address the city's long term financial problems.”<sup>7</sup> At the time the agreement was executed (April 2012), the City’s Mayor stated that the agreement “...provides necessary financial mechanisms to execute a process that will ensure the City’s fiscal stability over time. We believe this Financial Stability Agreement puts us on track to restructure our City financially and reestablish an economic infrastructure to make sure Detroit never faces these financial conditions again.”<sup>8</sup>

13. In its June 14, 2013 Proposal to Creditors, the City further committed to many of the same reforms – including efforts already undertaken – to make its operations more efficient, decrease costs and increase revenues, all outside of the bankruptcy system.<sup>9</sup>

14. Among other things, the City recognizes that improved tax collection is a potential source of substantial added revenue and has already undertaken efforts to effect it,<sup>10</sup> efforts undertaken without confirmation of a Chapter 9 plan of reorganization. For example, the City states in its Disclosure Statement that: “The City is implementing and will continue to implement initiatives designed to (1) identify and collect taxes from individual and business non-filers, (2) improve the collection of past-due taxes and (3) enhance tax collection efforts on a prospective basis.”<sup>11</sup>

15. To date, however, the City has only scratched the surface.<sup>12</sup> As stated in its Disclosure Statement: “Prior to the Petition Date, the City ... had commenced the implementation of initiatives

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<sup>7</sup> Frequently Asked Questions: City of Detroit Financial Stability Agreement, page 5.

<sup>8</sup> Financial Stability Agreement between the State of Michigan and the City of Detroit, April 10, 2012, cover page.

<sup>9</sup> City of Detroit Proposal for Creditors Executive Summary, June 14, 2013.

<sup>10</sup> *Ibid.*, page 21 (“Updating the current income tax system could (i) increase revenues for the City through improved revenue tax processing, tax compliance and collection and (ii) improve reporting, efficiency and accuracy.... The City’s billing, processing and collection of property taxes is inefficient. Recommendations made by consultant in 2011 have not been followed, even though implementation promises to increase efficiency of collection process.”).

<sup>11</sup> Disclosure Statement, Doc 4391, page 183 of 197.

<sup>12</sup> For example: “In an effort to collect taxes from individuals that did not file a tax return between 2006 and 2011, the City has mailed approximately 181,000 letters to individuals as of January 2014. As of January 31, 2014, this collection effort, along with a March 2013 tax amnesty program, has yielded approximately \$3.8 million in additional collections from these non-filers. Additionally, the Income Tax Division is pursuing, likely through a third-party collection agency, the collection of \$42 million in past due income taxes.” *Ibid.*, page 183 of 197. See also *ibid.*, page 184 of 197 (“As of the Petition Date, the City had commenced efforts to collect on significant past-due invoices and improve invoice-collection procedures going forward. For example, as of the Petition Date, the

designed to enhance tax collection rates going forward. In October 2012, the City created a Tax Compliance & Enforcement Unit for this purpose. In January 2013, the City launched an online registration system for businesses which, among other things, automatically captures employers' W-2 form data, enabling more accurate tracking of income taxes owed to the City... As of the Petition Date, the City also was considering the purchase of a new income tax system and upgrading to a 'common form' that would be compatible with such new system and which currently is used by 19 of the 22 Michigan cities that collect income taxes.<sup>13</sup>

16. The City has also identified 118,000 parcels for which \$504,387,629 in back property taxes and penalties is owed.<sup>14</sup> This is in addition to the tens of thousands of properties that were tax-foreclosed. As the testimony and other documentation in this case demonstrate, slumlords and speculators are essentially gaming the system to avoid paying taxes. There are landlords in the City who simply fail to pay taxes, wait for foreclosure, and then repurchase their properties (or have surrogates do so).<sup>15</sup> In this way they avoid paying property taxes altogether. The City itself acknowledges that, "Nearly half of all Detroit property owners failed to pay property taxes assessed by the City in 2011."<sup>16</sup>

17. Not only could the City do a better job of collecting the taxes already owed; there is also opportunity for increasing revenue by new tax measures, as will be discussed below.

18. The Emergency Manager's term is expected to expire this Fall, so there can be no expectation that his decisions will continue to dictate City activity over the next few months, much less the next ten years. Rather, power will revert to the current Mayor and City Council and, over the course

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City was seeking payment of approximately \$50 million in outstanding accounts receivable owed to the BSEED, and approximately \$8 million in past-due permitting, licensing and other fees owed to the City by Wayne County.").

<sup>13</sup> Disclosure Statement, Doc 4391, page 184 of 197. See also City of Detroit Proposal for Creditors, June 14, 2013, page 80 ("Compuware has identified historical non-filers with outstanding tax obligations totaling approximately \$250 million. The City is pursuing collection of these taxes."); City of Detroit, Operational Restructuring Summary, November 11, 2013, page 35 ("The Creditor Plan assumes \$10 million in collections from past due income taxes. Actual collections could be higher as the City is pursing maximization strategy on approximately \$42 million income tax receivables. The Creditor Plan does not assume increased income tax collection as a result of an effective income tax audit/compliance function.").

<sup>14</sup> Detroit Blight Removal Task Force Plan, May 2014, pages 200-201.

<sup>15</sup> *Ibid.*, page 216 ("Under current law, a land speculator may buy a house at auction for \$500 and never pay taxes on it. Then, when the municipality forecloses on the property, the speculator can simply buy it back for another \$500, and not have to pay the taxes owed.") See also Deposition of Gary Evanko, June 24, 2014, pages 102-106.

<sup>16</sup> Disclosure Statement, Doc 4391, page 131 of 197.

of the next ten years, may be held by as-yet-unelected City officials. These officials may have quite different views as to the appropriate way to govern the City and to invest its funds, and will certainly be subject to quite different incentives. They may decide to significantly alter the reinvestment plan upon which the City's forecasts rely, or take other actions substantially affecting the City's revenues and expenditures.

19. Assessing the City's forecasts of both revenue and expense on a more granular level, one finds that forecasts for ten out of the twenty-five line items addressed in Mr. Malhotra's expert report were purportedly derived from either "historical" or "recent trends"<sup>17</sup> (in some cases adjusted), with no information provided beyond that, as would be needed to evaluate his methods. Such information typically includes a description of how the estimated trend was derived; a mathematical formulation of the trend, often with a geometric representation relative to historic values; the time period (i.e., range of actual past values) used as the basis for calculating the trend; and, as appropriate, specification of how any adjustments to the asserted trend impact it, along with the data and methods underlying such adjustments. Absent such information, to explain a forecast as being based on a "trend" is, in my experience, equivalent to *ipse dixit*.

20. Furthermore, if Mr. Malhotra's trends are all indeed derived from only "...about four years of data..."<sup>18</sup> – as his testimony indicates – they would in many cases be an entirely unreliable basis for a ten-year (much less forty-year) forecast. For example, considerable evidence points to lax tax enforcement by the City over the last few years, a problem being addressed. Failure to adequately correct for this factor would lead to an understatement of future revenue, while also implicitly endorsing a level of performance that many might find unacceptable. (A more comprehensive listing of the information gaps in Mr. Malhotra's report can be found in Appendix A. Ongoing discovery may yield additional information.)

21. That lack of documentation, and invocations of "judgment" in place of transparent method in Dr. Cline's, are especially troubling given the effect that even small changes in assumptions can have

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<sup>17</sup> Sales and Charges for Services; Parking/Court Fines and Other Revenue; Grant Revenue; Licenses, Permits and Inspection Charges; Revenue from Use of Assets; DDOT Risk Management Reimbursement; Parking and Vehicle Fund Reimbursements; Overtime; Other Benefits; and Utility Expenditures. See Appendix A.

<sup>18</sup> Deposition of Gaurav Malhotra, July 15, 2014, page 221, lines 16-21.

on the amount of funds available to creditors, as well as the apparent “slant” imparted to those assumptions, further addressed below.

22. As shown in Table 1, below, had Mr. Malhotra assumed FY 2020-FY 2023 employee wage increases equal to those assumed by Dr. Cline for all Detroit workers, his forecast costs would have been less by about \$45 million. And had Dr. Cline’s wage inflation assumption also formed the basis of this year’s labor agreements with City workers, the corresponding savings would have been \$270 million.

**Table 1**

<b>IMPLICATIONS OF THE CITY’S FORECAST CASH FLOW MODEL (Property Tax Revenue Forecast Addressed Elsewhere)</b>	
	Impact, FY 2014 – FY 2023
(1) Discrepancy between Dr. Cline’s Assumption of 1.0 % Annual Wage Inflation for All Detroit Workers <sup>(a)</sup> and Assumed Increases in City Employee’s Salaries, Wages and Related Overtime and Fringe Benefits of 2.0% annually beginning FY 2020. <sup>(b)</sup>	<b>\$45 Mil. More in Costs</b>
(2) Rejection of Initial Methodology for Forecasting Wagering Tax Revenues and Substitution of Hard-Coded Assumptions with No Discernible Basis. <sup>(c)</sup>	<b>\$121 Mil. Less in Revenue</b>
<small><sup>(a)</sup> Cline Report at page 10.  <sup>(b)</sup> Malhotra Report at page 10. Note that in the City’s forecasting model, changes in Salaries and Wages proportionately affect both Overtime and Fringe Benefit costs.  <sup>(c)</sup> See POA00706898 – Exhibit C.3</small>	

23. Further, had the City’s consultants not rejected their initial methodology for forecasting wagering tax revenues and substituted a hard-coded set of assumptions lacking any discernible basis, forecast revenue would have been well over \$100 million greater (combined effect with the more limited labor cost adjustment, \$266 million less in forecast funds available).

24. Built into forecasts with a horizon of not just ten years but forty, and thus commensurately compounded, discrepancies such as these correspond to enormous amounts of money.

### ***The City's Property Tax Revenue Forecast***

25. Chart 1 provides an overview of the history, post-1980, of General Fund-related revenues derived from the City's income tax, the County's property tax, and the City's share of State sales and use tax levies ("Revenue Sharing"), while also depicting the City's forecasts of those revenues from FY 2013 through FY 2023. Notable features of these forecasts include the City's assumed continuing decline in property tax revenue and a disparity in assumed post-FY 2012 trends as between municipal income tax revenue and Revenue Sharing, on the one hand, and property tax revenue, on the other. The City's forecasts assume that there will be modest increases in income tax and revenue sharing while simultaneously assuming that property tax revenues will decline.

26. That disparity in assumed growth trends in the City's forecasts cannot be reconciled with the fact that, on a long-term basis, the revenues associated with most important taxes tend to move in parallel fashion, growing as local, state, or national economies grow – if, to varying degree, exhibiting some cyclicality closely correlated with the state of the national economy. (Chart 2.) This is a fact the City acknowledges, to wit: "The City seeks to increase the revenues it receives from personal income taxes by broadening the City's tax base and creating conditions that are likely to foster economic growth... Fostering conditions that promote economic growth could also help expand the City's property tax base by encouraging both new construction and the appreciation in value of existing real estate."<sup>19</sup>

27. Another "red flag" with respect to the City's forecasts of property tax revenue are their implications with respect to the size of the tax base, i.e., "[total] property taxable value."

28. *By way of background:* As shown in Chart 3, from FY 1988 up to the financial crisis and related housing market collapse, the City's General Fund-related property tax revenue increased proportionately with property taxable value, as one would expect. A substantial gap then opens, with revenues falling well short of what taxable value would have implied. One cause of that shortfall is almost certainly property owners' lessened ability to comply with their obligations due to the joint effect of the past recession and long-term erosion in the City's economic base (a process which, as will soon be shown, has stopped and reversed itself). However, there is considerable evidence that the lingering post-recession gap between taxable value and tax collections is also due, in large degree, to declining efficiency in tax assessment and collection procedures.

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<sup>19</sup> Disclosure Statement, Doc 4391, page 183 of 197.

Chart 1

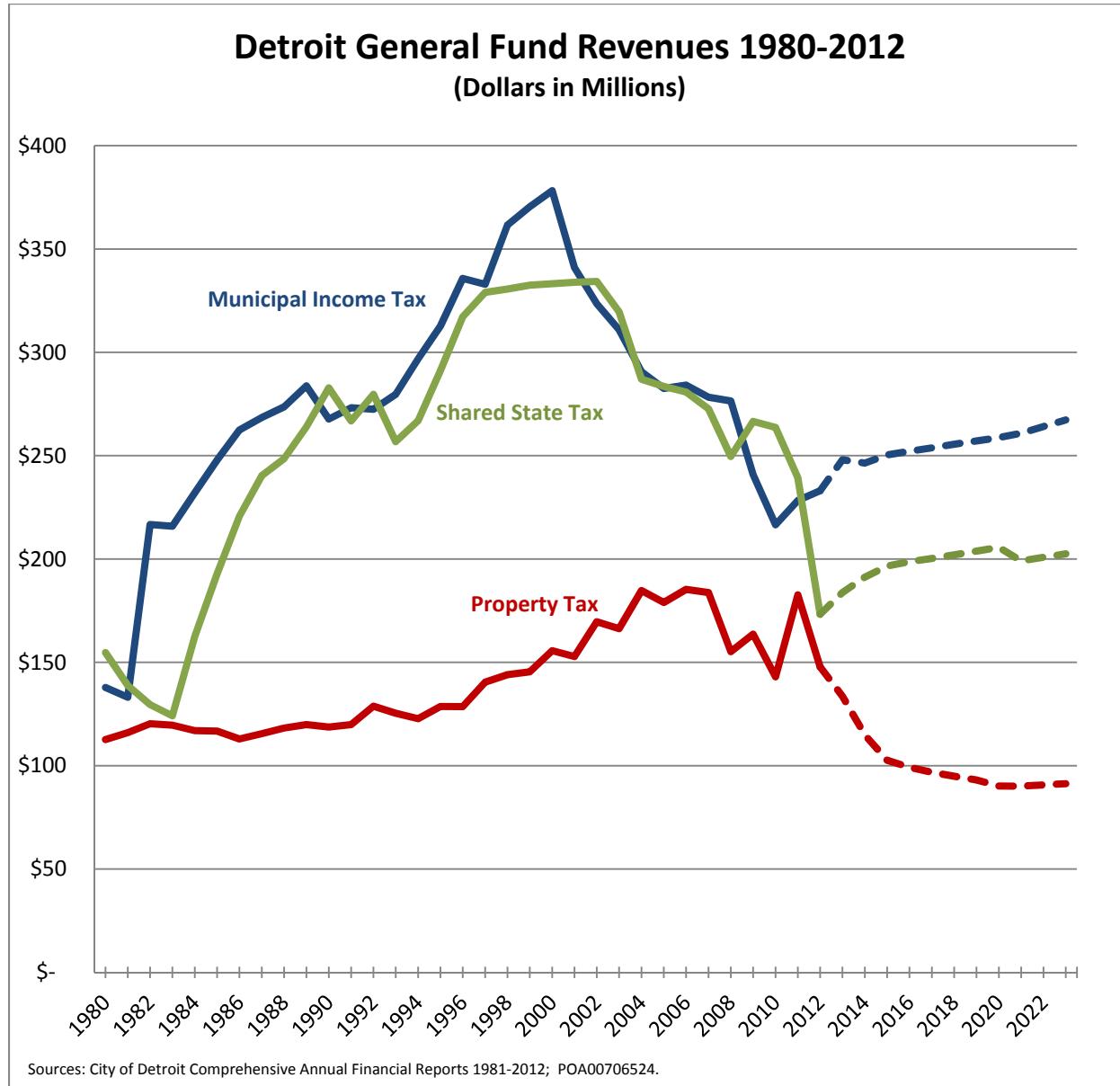


Chart 2

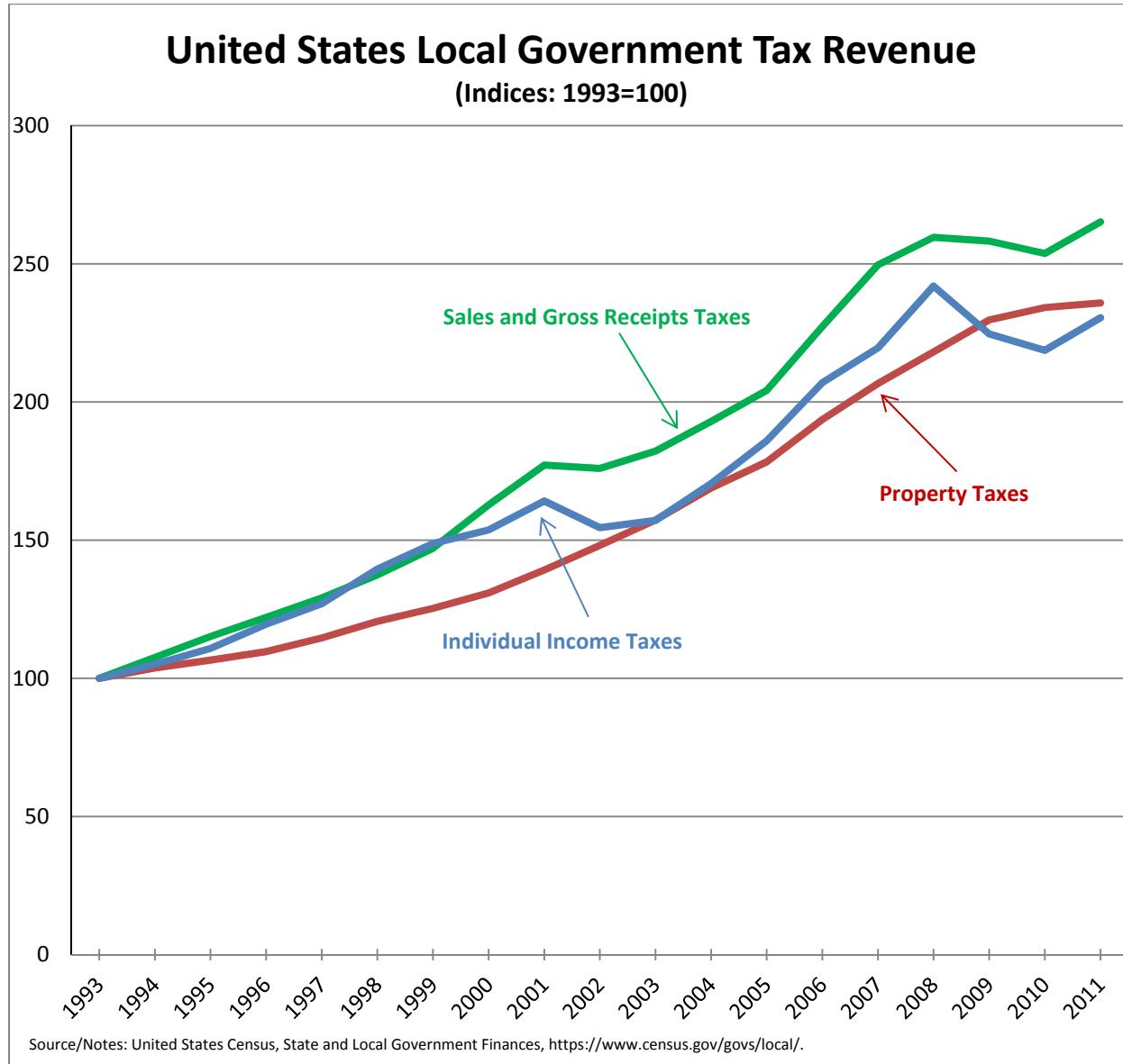
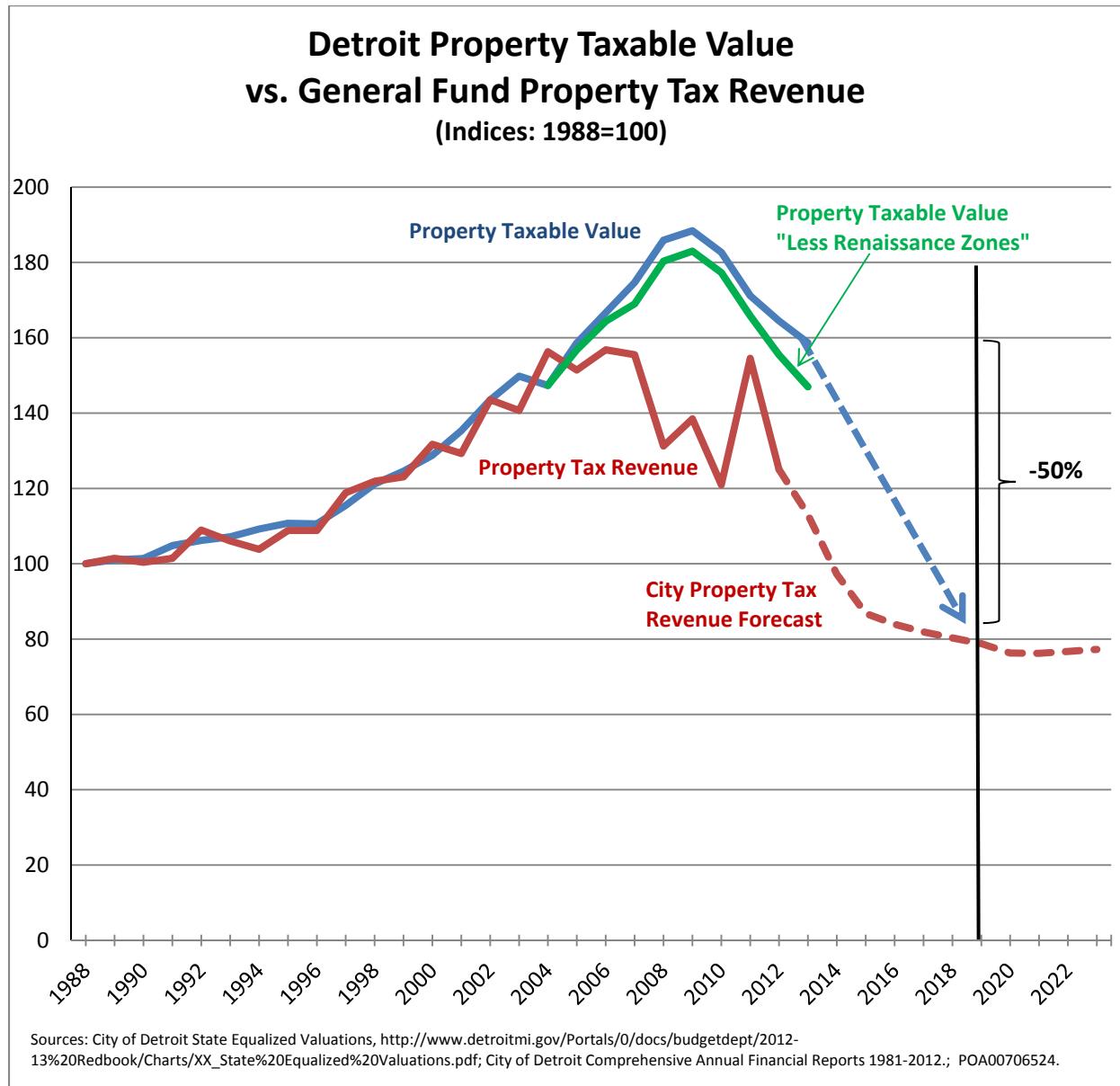


Chart 3



29. Such evidence also includes the extensive findings of Plante Moran with respect to the structure and operations of the City's Assessing Division<sup>20</sup> – for example, the fact that as of 2013, the Division had less than a third the appropriate number of functional staff (35 versus 114<sup>21</sup>) – and the deposition testimony of Gary Evanko – appointed Chief Assessor in October of last year – as to problems both at his own division and at the City's Treasury Department, which is responsible for tax collection, and efforts already underway to solve them.<sup>22</sup>

30. For example, Mr. Evanko acknowledges that tax bills are often never mailed, or mailed to parties not owning the property at issue – a problem he is "...making every effort to remedy."<sup>23</sup> He further acknowledges that: (a) "...inadequacies of the assessment records and data is not only a perception, it's a reality;" (b) insofar as that impairs the Division's ability to enforce tax obligations, taxpayers are more likely not to honor them; (c) the Department's consistent failure to respond to Michigan Tax Tribunal petitions to lower assessments would not only aggravate the enforcement problem, but also lead to an undervaluation of the tax base; and (d) the inability of the Wayne County Treasurer's office to complete foreclosures in a timely manner may also impede tax enforcement,<sup>24</sup> thus further encouraging delinquencies. All the foregoing further indicates that there is significant additional revenue to be had through improved property tax collection.

31. Chart 3 shows that the City's revenue forecasts assume a *fifty percent reduction* in taxable values in coming years, relative to FY 2013. This reduction would, moreover, be additive to a 37.2 percent reduction in average assessed value per parcel already effected over the five years from FY 2008 to FY 2013.<sup>25</sup> Thus, Ms. Sallee and her colleagues at Ernst & Young would have us believe that despite a reasonable expectation of moderate economic recovery over the forecast period (see below), by FY

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<sup>20</sup> Plante Moran, "City of Detroit, Assessing Division – Observations and Opportunities – Draft," undated but apparently 2013 (POA00005794-5816) and "City of Detroit Assessing Division Operational Recommendations – Draft," 2013 (POA00013353-83).

<sup>21</sup> "City of Detroit Assessing Division Operational Recommendations – Draft," 2013, page 6 (POA00013358).

<sup>22</sup> Deposition of Gary Evanko, June 24, 2014 – see, *inter alia*, page 129, lines 11-22.

<sup>23</sup> *Ibid.*, page 113, line 17 through page 114, line 14.

<sup>24</sup> *Ibid.*, page 120, line 18 through page 124, line 20.

<sup>25</sup> Plante Moran, "City of Detroit Assessing Division Operational Recommendations – Draft," 2013, page 6 (POA00013358).

2023 the aggregate value of all taxable property in the City will be only about a third (31.4 percent) of what it had been fifteen years earlier.

### Contrary Trends

32. Chart 4 on the following page depicts the trend (really, trends) in monthly employment in the City from 1990 through March of this year. This statistic is a good measure of the size of Detroit's economy, although likely understating it in the long-run due to technological change and the substitution of capital for labor. In addition, Dr. Cline acknowledges that, "What was most important" for the City's revenue forecast "was *changes in employment trends* in Detroit."<sup>26</sup>

33. As shown, over the period covered, employment changes have gone through five distinct phases: (1) sustained growth during the 1990's; (2) sustained decline from 2000 through 2007, in part due to the national recession of 2001, but primarily a result of the region's loss of industry; (3) a steep decline in 2008 and 2009 closely related to the most recent recession (see below), but also due to continued erosion in the region's industrial base; (4) stabilization of employment post-recession, through 2011; and (5) increasing employment since. Similarly, after declining from 2003 through 2009, real gross domestic product (GDP) for the Detroit Metropolitan Area has been increasing, from \$160.7 billion in the latter year to \$183.1 billion in 2012, the latest year for which data is available.<sup>27</sup>

34. Consistent with its forecast of both property and income tax revenue, the City not only underestimates local employment in 2013; it forecasts *declining employment through 2021*,<sup>28</sup> despite steady growth over the last three years and a positive prognosis for employment at the national level.<sup>29</sup>

35. Both the City's forecasts and actual values through May are illustrated in Chart 5. Because the former are annual averages rather than monthly amounts, they are represented by horizontal lines.

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<sup>26</sup> Deposition of Robert Cline, July 14, 2014, page 162, line 19 through page 163, line 6. (Emphasis added.)

<sup>27</sup> Source: U.S. Department of Commerce, Bureau of Economic Analysis,  
<http://www.bea.gov/iTable/iTable.cfm?reqid=70&step=1&isuri=1&acrdn=2#reqid=70&step=1&isuri=1>

<sup>28</sup> See expert report of Ms. Kopacz at page 44 for a clear presentation of the relevant data.

<sup>29</sup> See, for example, Lucia Mutikani, "U.S. Recoups Jobs Lost in Recession as Economy Picks Up," Reuters, June 6, 2014, <http://www.reuters.com/article/2014/06/06/us-usa-economy-idUSKBN0EH0JJ20140606>, and Bureau of Labor Statistics, Labor Force Statistics from the Current Population Survey, Series LNS12000000, Seasonally Adjusted [National] Employment Level, available at <http://www.bls.gov/ces/#data>.

Chart 4

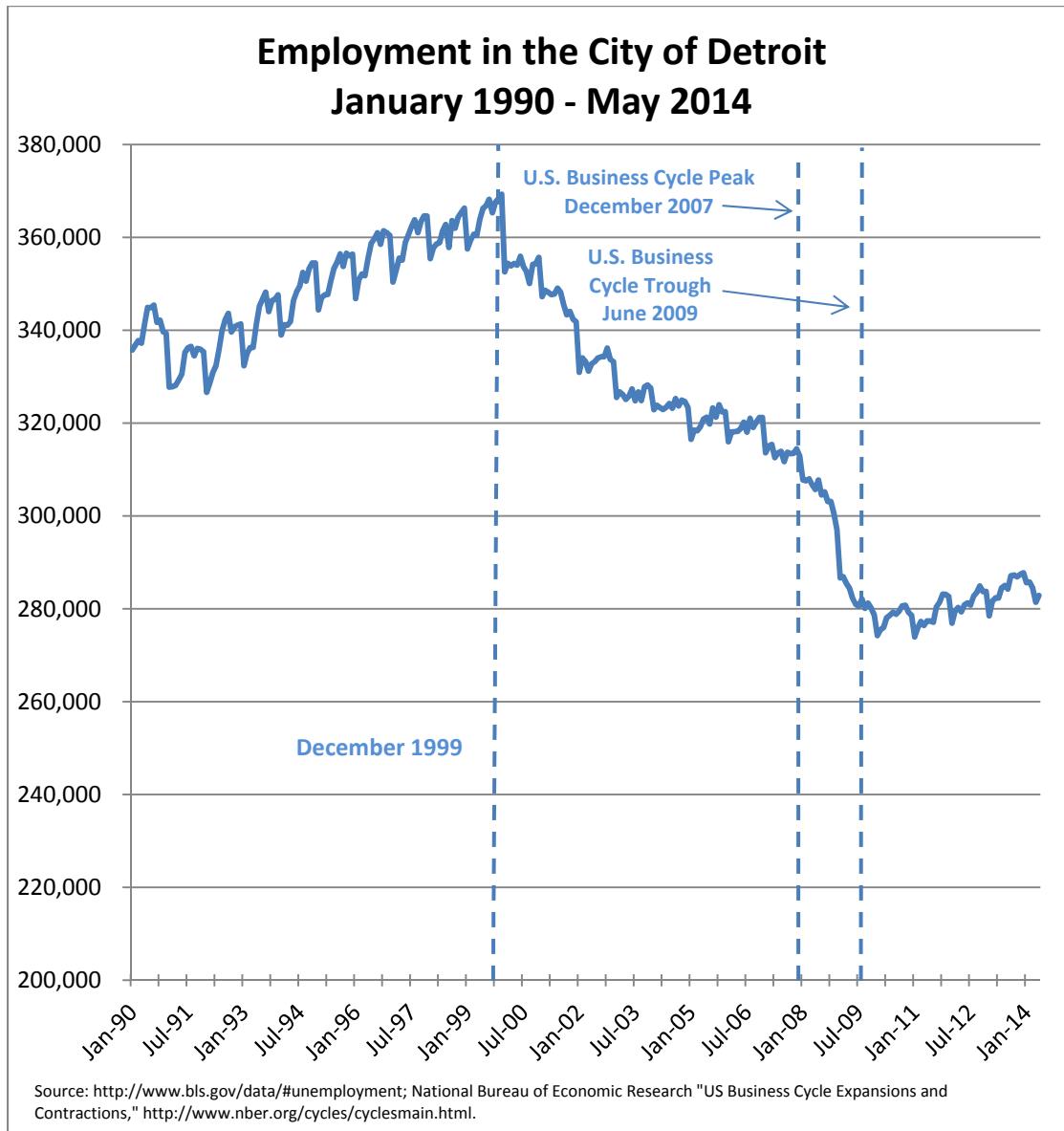
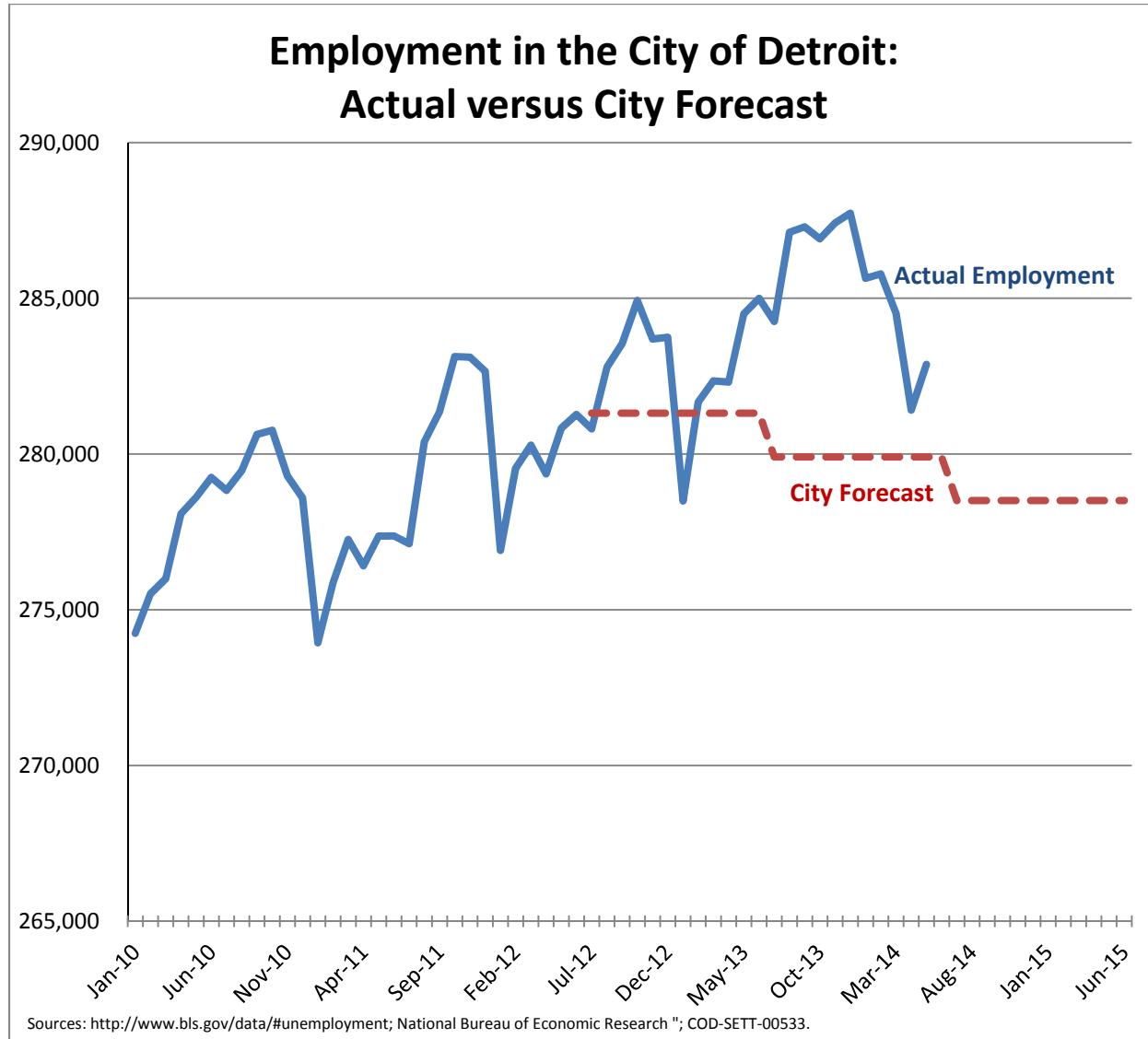


Chart 5



36. Indeed, implicit in the City's property tax revenue forecast is a historic – and unsubstantiated – change in a fundamental economic relationship. As shown in Chart 6, were the City's revenue projections to prove true, in 2016 or thereabouts, those revenues would be less than citywide employment, with both defined relative to their values in 1990. And the gap would continue to open for at least twenty years if *any* significant growth in employment is assumed. Such a scenario would necessarily entail the abandonment of the City by many of those productive individuals still residing in it, as well as a reduction in the value of the commercial and industrial property relative to employer payrolls which the City has not endeavored to prove. In focusing on the post-2003 period, Chart 7 brings this assumed structural change into stronger relief.

37. The City's pessimistic scenario is also contradicted by the attenuation of the population declines experienced by the City in past decades (Chart 8), and an upward trend in housing prices over the past two-plus years, as discussed below.

38. While Ms. Sallee and her colleagues rely on the average price of homes sold in their forecast, that statistic can be an unreliable indicator of market price trends because of changes in the mix of properties sold (for example, a shift from the sale of higher-value homes to lower-value homes) and/or the conditions of sale (i.e., a shift from normal to foreclosure, other distressed, and/or non-arm's length sales). This is a particularly significant consideration in the Detroit market in recent years. As noted by Plante Moran in its draft assessment of the City's Assessing Division, "One assessor estimates that of the 12,000 sales included in last year's [2012's] sales study, only 550 were arm's length transactions."<sup>30</sup> In other words, the City's own consultants have determined that the vast majority of home sales in Detroit are *not* arm's-length transactions.

39. It is in consideration of such distortions in the measurement of price that home price *indexes* have been developed, seeking to track changes in the arm's length, market price of homes with similar attributes, such as the S&P Case-Schiller Index discussed below. The City's forecasts fail to consider these standard economic indices and, as a result, yield conclusions that are scientifically unsound and unreliable.

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<sup>30</sup> Plante Moran, "City of Detroit, Assessing Division – Observations and Opportunities – Draft," undated but apparently 2013, page 21 of 23 (POA00005814).

Chart 6

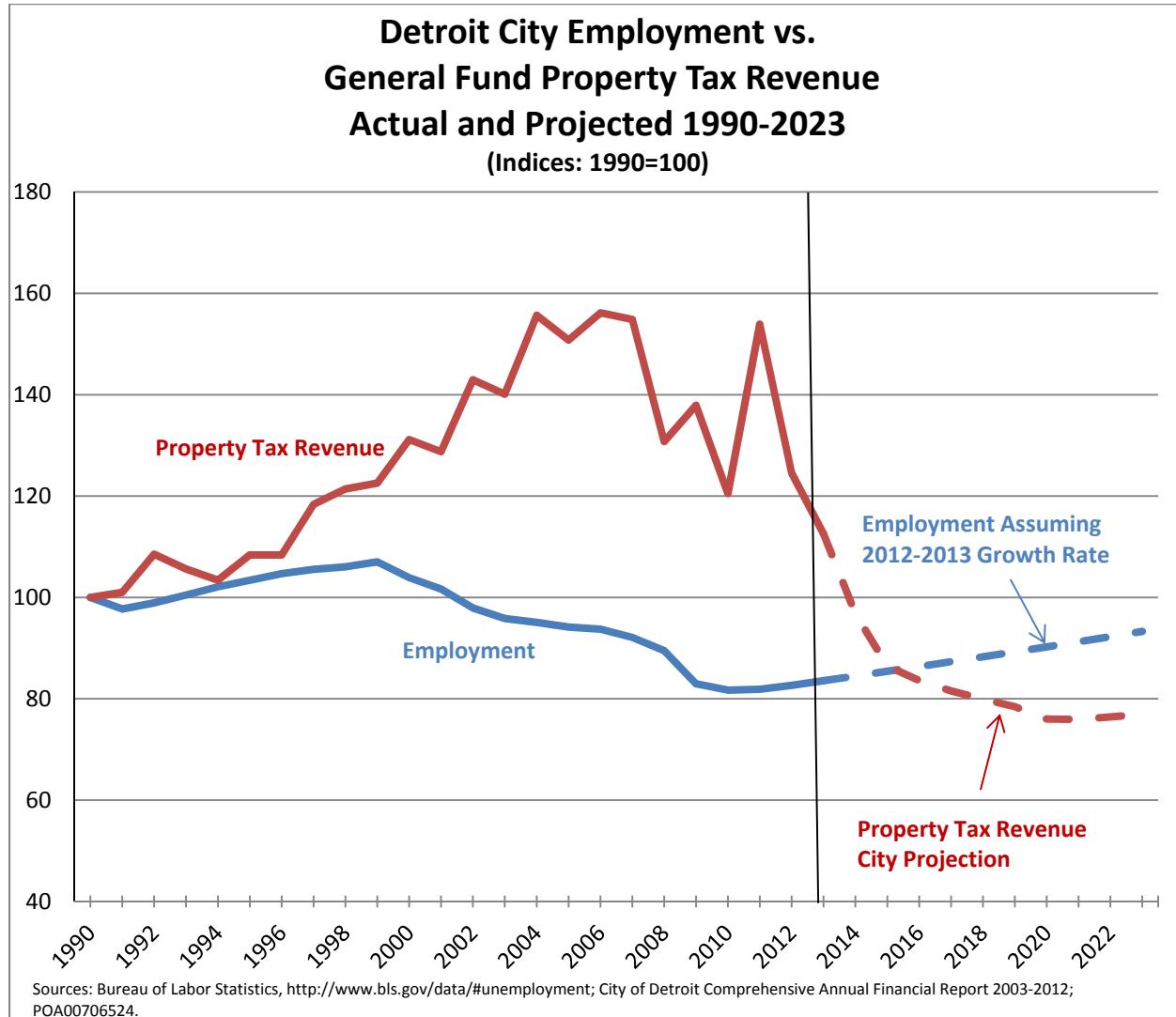


Chart 7

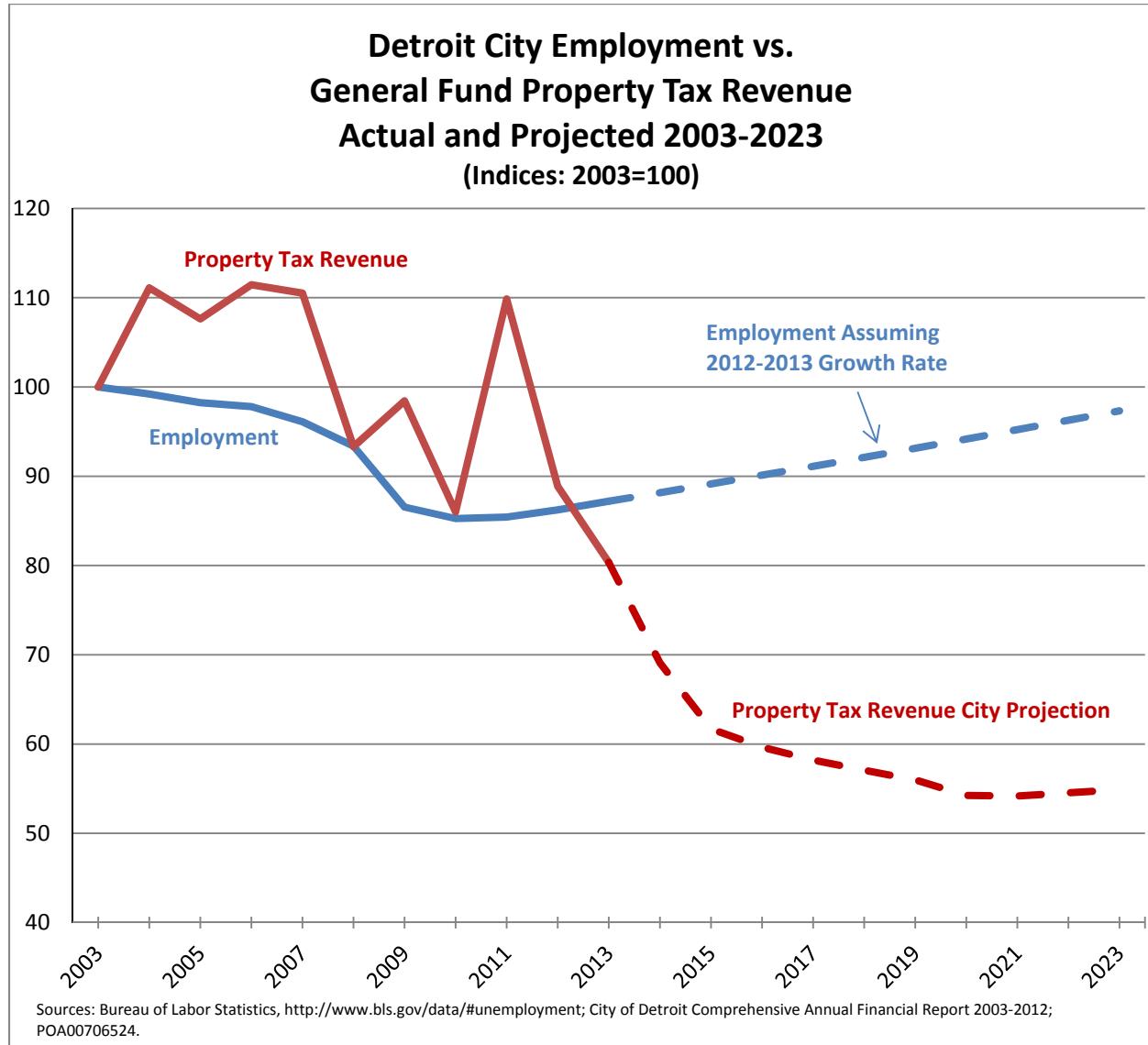
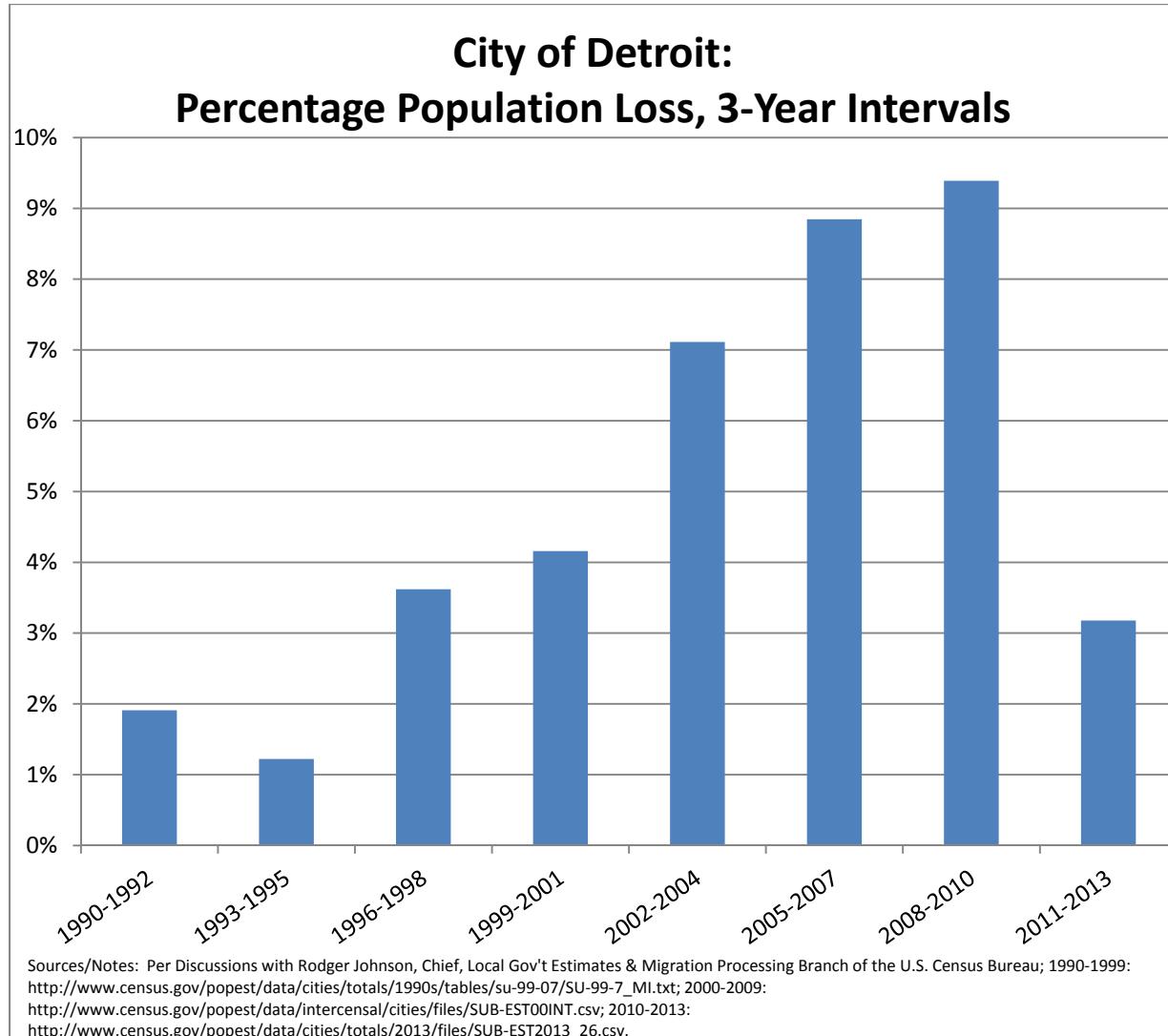


Chart 8



40. However, keeping the foregoing caveats in mind – especially important in the case of Detroit, given the proliferation of foreclosure sales in the latter part of the last decade<sup>31</sup> – the increasing average price of homes sold in the City in every year since 2010 points to an improving housing market, another trend contrary to the City's property tax revenue projections. (Charts 9 and 10.) Nevertheless, one must also recognize that while home values will be correlated with property tax revenues over the long-run, little correlation has existed over the last ten years, due to increased volatility in the housing market. (Chart 11.) Indeed, one favored attribute of the property tax is its tendency to smooth-out government cash-flows that might otherwise be more cyclically sensitive. In this sense, the property tax acts as the “level head” in the room, when others may be overly reactive. The State’s CPI-based constraint on reappraised values for homes not sold has a similar effect.

41. A recovery in area home prices starting in early 2011 is also indicated by the S&P/Case-Shiller Home Price Index for the Detroit Metropolitan Statistical Area (MSA).<sup>32</sup> (Chart 12.) Based on that index, home prices in the MSA have increased by almost fifty percent in the last three years.

42. Furthermore, again based on that index, real property taxable value in the City as of FY 2013 was more closely aligned with market values than at any time since 2007, with no marked deviation between the two series relative to values in 1991. (Chart 13.)

43. Exhibit 1 contains pages excerpted from PNC Bank’s “Detroit Market Outlook” as of the third quarter of 2013, an analysis which also relates to the Detroit MSA. Continued growth through 2015 is forecast for employment, personal income and home prices, with population losses reversing.

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<sup>31</sup> The impact of post-2007 home price declines on total property tax collections has been limited in any case, given: (a) the fact that most housing units have not changed hands over the past six years; and (b) the limited contribution of the tax on residential real property to total property tax collections. Estimated total citywide home sales from 2008 through 2013 (47,925) corresponded to only twenty percent of the City’s detached single-family homes as of 2012 (238,925, per the U.S. Census Bureau), and only thirteen percent of its total housing units in the same year (366,641, same source). See Michigan Realtors (association), <http://www.mirealtors.com/Housing-Statistics> and U.S. Department of Commerce, Bureau of the Census, American Housing Survey, Selected Housing Characteristics, 2012 American Community Survey 1-Year Estimates, Detroit city, Michigan.

Given that, as of FY 2011 (latest data provided as of this date), residential real property tax collections accounted for 37.4 percent of total City property tax collections (“2011 City of Detroit Property Tax Collection Summary,” page 6, POA00178801-8806), collections impacted by home sales from 2008 through 2013 could only have amounted to roughly five percent ( $0.131 \times 0.374$ ) of total collections over that period.

<sup>32</sup> Includes Wayne, Lapeer, Livingston, Macomb, Oakland and St. Clair Counties.

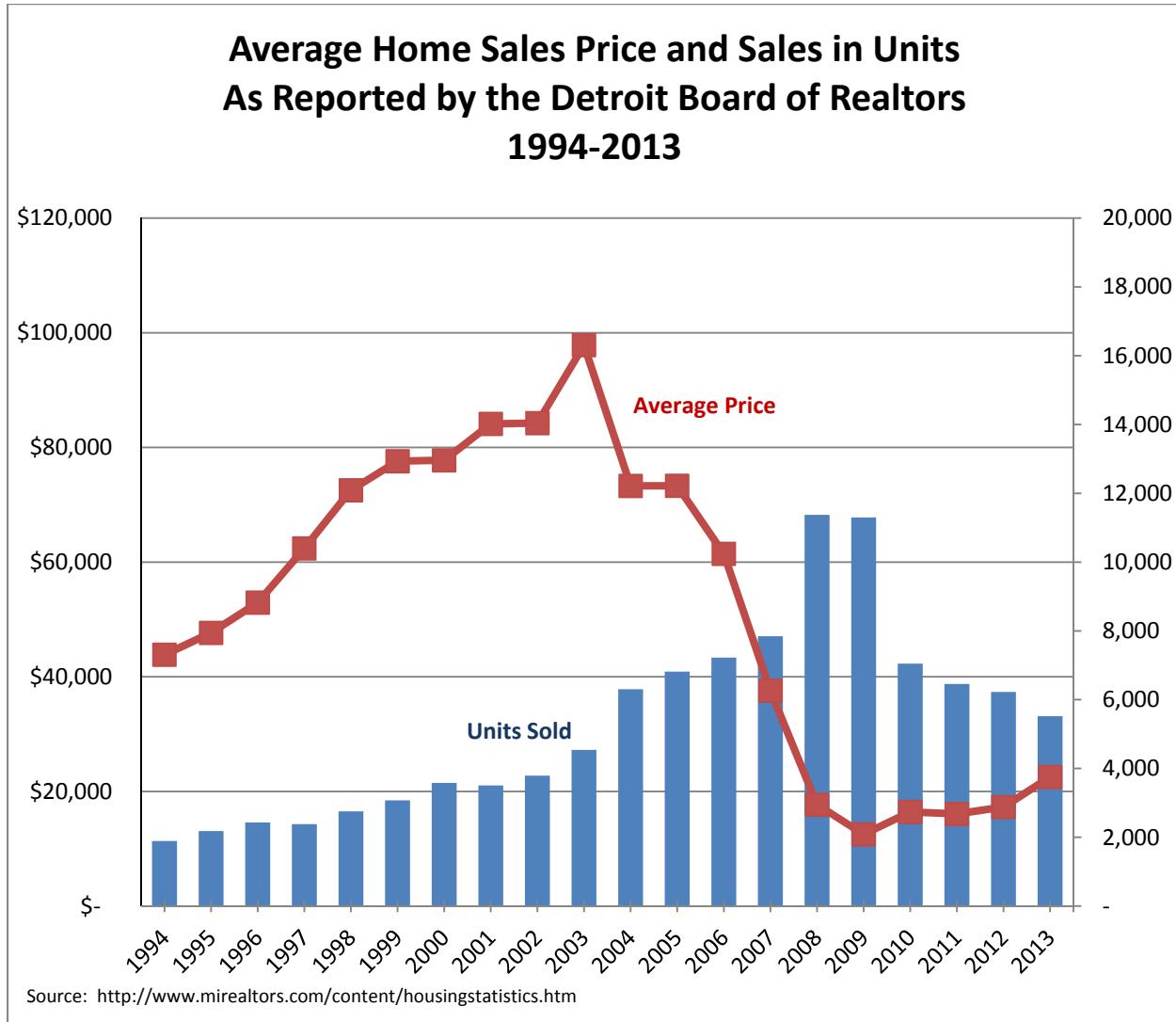
Chart 9


Chart 10

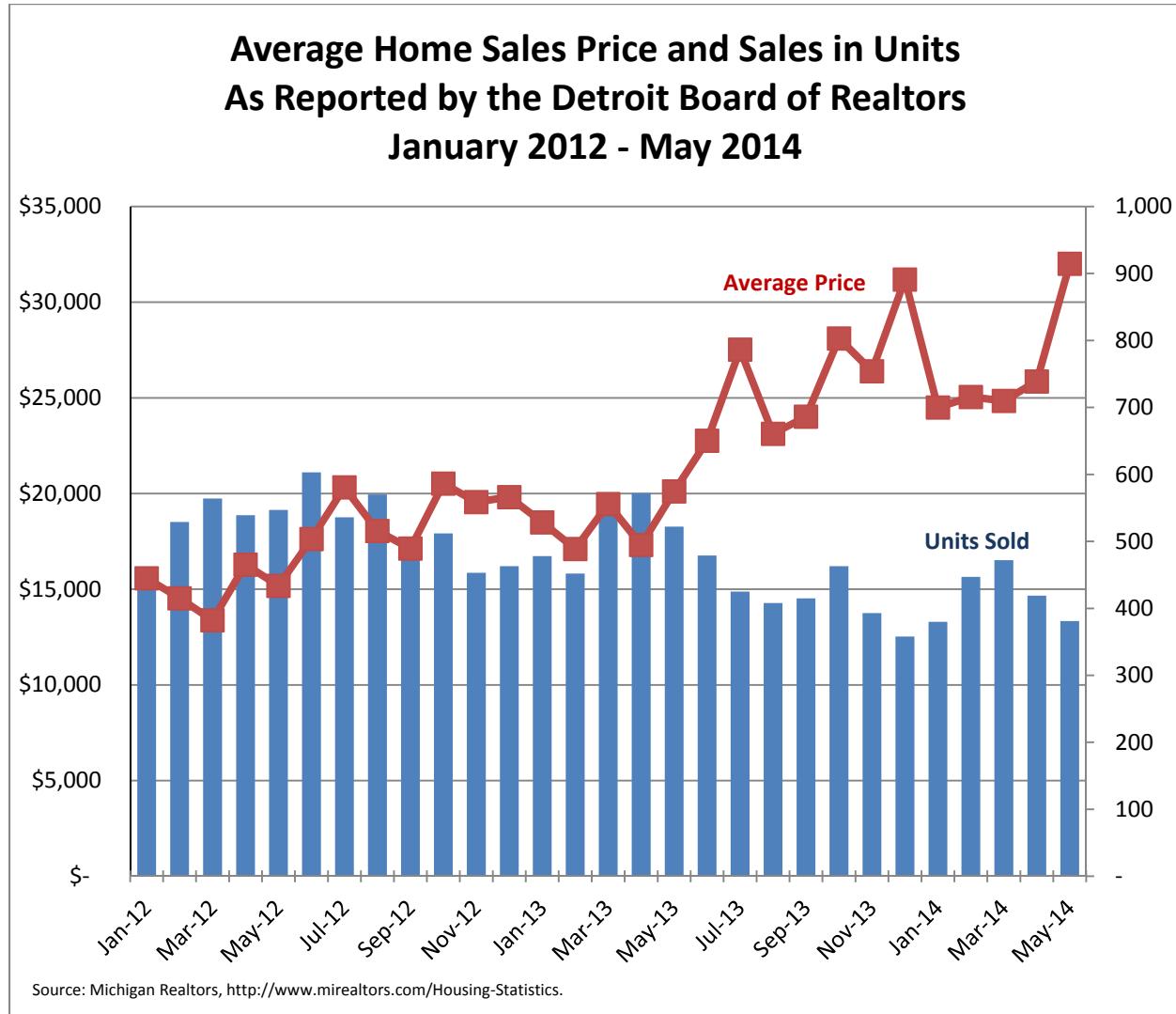


Chart 11

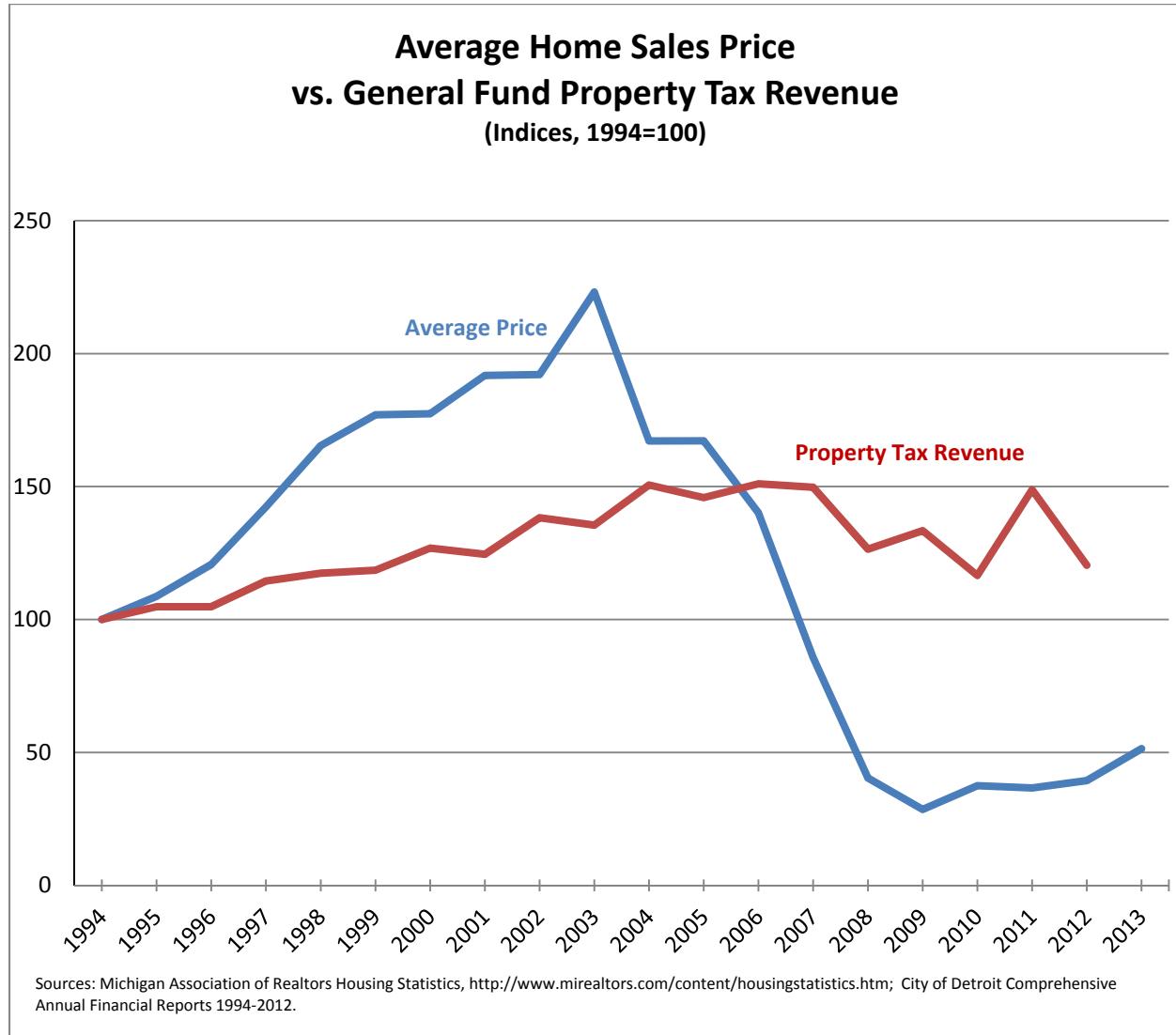


Chart 12

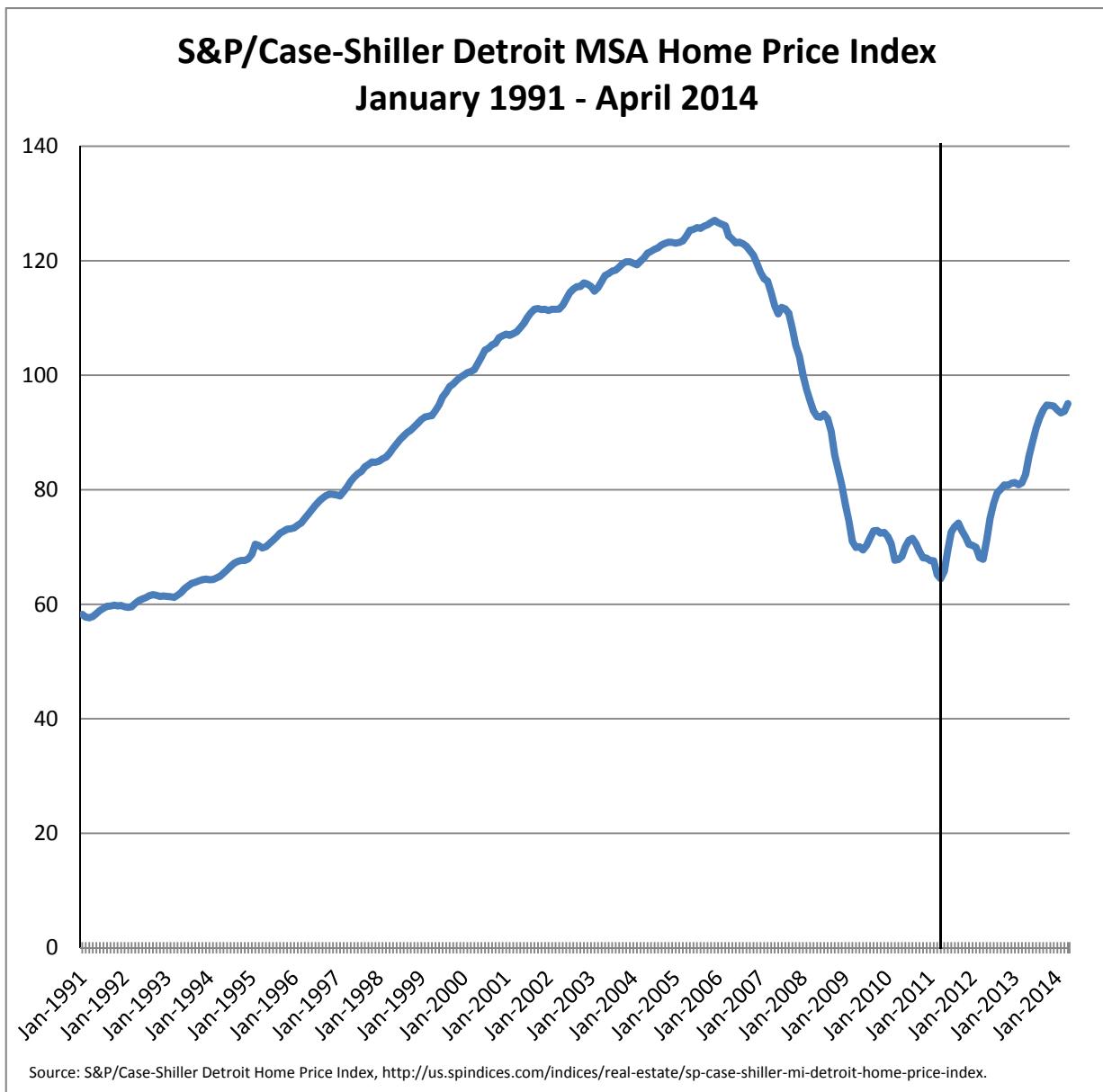
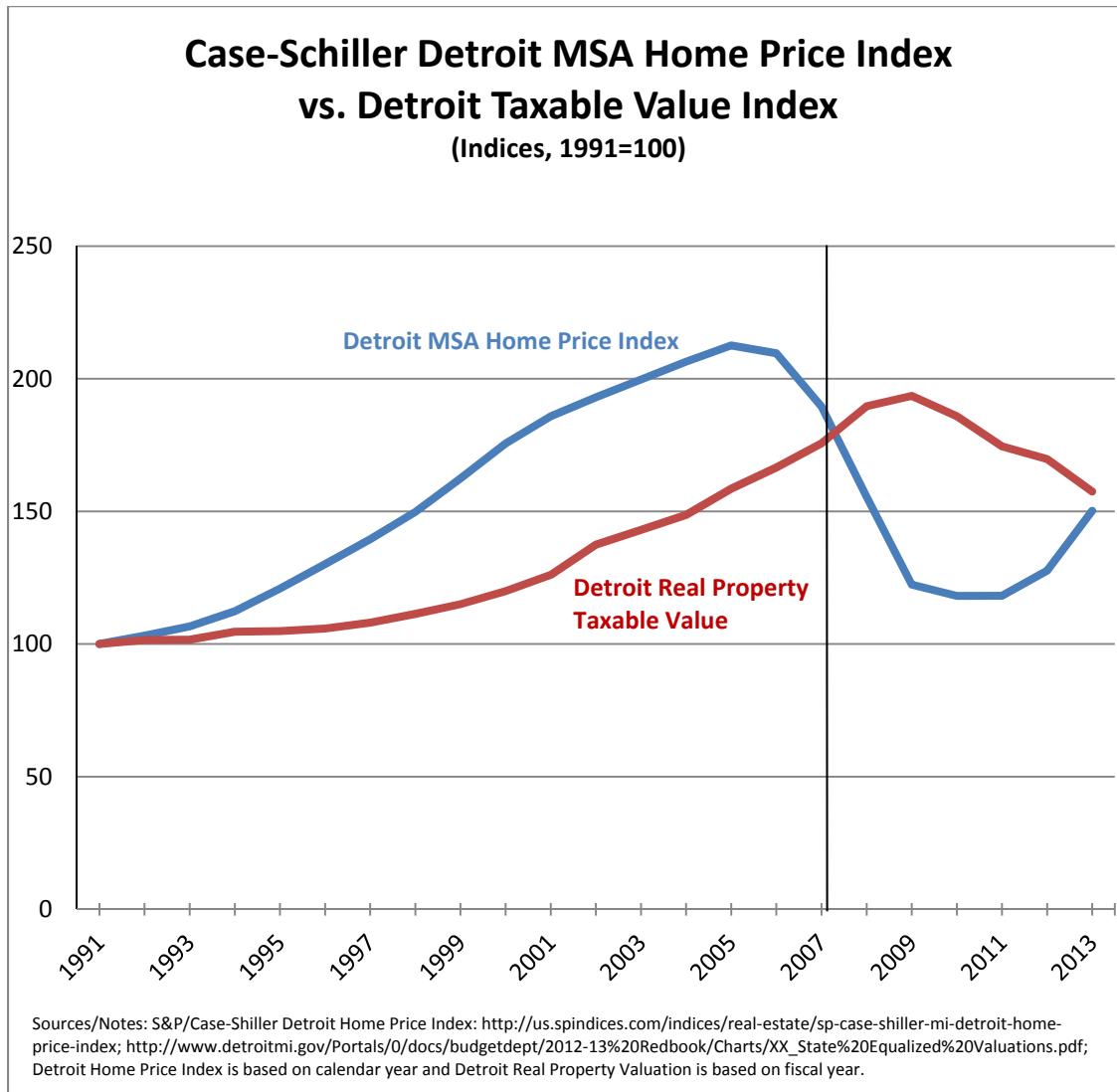


Chart 13



44. Indeed, the Detroit market has recently been labeled a top “Turnaround Town” for residential real estate.<sup>33</sup> A number of commentators agree that the City is in the midst of an economic comeback, their observations themselves constituting information which would tend to increase property values:

- (a) The Regional Chamber of Commerce notes the following Detroit facts: “Approximately \$12 billion (US) in private investments since 2006” “12,000 new jobs in Detroit’s Central Business District since 2010” “Unemployment has decreased by 12% since July 2009” “Housing prices have increased by 25% since July 2012”<sup>34</sup>
- (b) “While significant challenges remain, there is no denying the fact that a dramatic transformation is under way. Increased investment is rejuvenating downtown and driving growth as businesses, investors and entrepreneur are recognizing Detroit as a city of opportunity.”<sup>35</sup>
- (c) “Detroit is seeing increased investment, economic activity and an influx of talent while anchoring one of the nation’s most prosperous regions. Detroit is home to one of the fastest growing IT sectors and America’s resurgent automotive industry while serving as a national leader in health care.”<sup>36</sup>
- (d) “Since 2006, approximately \$12 billion has been invested in commercial, industrial and residential properties in the city of Detroit. Corporations, such as Quicken Loans and Blue Cross Blue Shield, have added nearly 12,000 jobs in downtown Detroit over the past few years. With entrepreneurs and young professionals capitalizing on low real estate prices and growing career opportunities; the city is on the rise.”<sup>37</sup>

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<sup>33</sup> Detroit Named a Top “Turnaround Town” for Residential Real Estate, August 7, 2013, [http://blog.mlive.com/business/detroit\\_impact/print.html?entry=/2013/08/detroit\\_named\\_a\\_top\\_turnaround.html](http://blog.mlive.com/business/detroit_impact/print.html?entry=/2013/08/detroit_named_a_top_turnaround.html)

<sup>34</sup> Detroit Regional Chamber, Detroit: Facts on Bankruptcy and Transformation, page 4.

<sup>35</sup> Detroit Regional Chamber, Detroit: Myth vs. Reality, <http://www.detroitchamber.com/economic-development-2/region-overview-2/why-the-detroit-region/detroits-turnaround/>

<sup>36</sup> *Ibid.*

<sup>37</sup> *Ibid.*

(e) "Detroit is growing in popularity as a place to live. Condo, loft and apartment housing in the Downtown and Midtown areas are essentially sold out -- reflecting the growing popularity of Detroit as a destination residential locale. 97% of downtown Detroit's and 95% of Midtown's rental apartments are occupied. Young professionals with bachelor's degrees living downtown have increased by 59 percent since 2000."<sup>38</sup>

(f) "Dozens of companies, many of them in creative industries such as advertising, architecture and design, are flocking to central-city Detroit in a surprising reversal of the mass exodus to the suburbs that took place during the past half century..... A report released in February by the Hudson-Webber Foundation offers a snapshot of what's been happening [to] Detroit's major business district in recent years. The report says there has been \$6 billion worth of real estate projects built in the greater downtown area since 2006."<sup>39</sup>

(g) "[T]he fundamentals of the city remain strong, [Governor] Snyder says."<sup>40</sup>

(h) "Multiple real estate data sources have pointed to sharply rising home prices for months now in Metro Detroit, with some reporting strong double-digit increases -- at times as high as 50 percent."<sup>41</sup>

45. Such trends, and their implications for City property and income tax revenues, have been recognized by other commentators. For example, as the City observed, "[i]ncome tax revenues were up \$4.7 million in 2012 as the economy and employment slightly improved."<sup>42</sup>

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<sup>38</sup> Detroit Regional Chamber, Detroit: Myth vs. Reality.

<sup>39</sup> "In Turnaround, Suburbs Lose Business to Detroit after Years of Flight," May 31, 2013, <http://www.detroitchamber.com/economic-development-2/region-overview-2/why-the-detroit-region/detroits-turnaround/>.

<sup>40</sup> Four Months after Bankruptcy, Michigan Leaders Reframe Detroit as America's Comeback City, Forbes, November 8, 2013, <http://www.forbes.com/sites/danalexander/2013/11/08/four-months-after-bankruptcy-michigan-leaders-reframe-detroit-as-americas-comeback-city/>.

<sup>41</sup> Detroit Named a Top "Turnaround Town" for Residential Real Estate, August 7, 2013, <http://www.nationalmortgagenews.com/features/Detroit-Housing-Turnaround-Finally-Gets-Off-Ground-1039379-1.html?zkPrintable=true>. ("Detroit's housing market ranked 7th overall in a Realtor.com 'Turnaround Towns' study of the national housing market in the second quarter, the real estate tracking firm said in a report Wednesday."). See also Mark Fogarty, Detroit's Housing Turnaround Finally Gets Off the Ground, National Mortgage News, October 11, 2013 ("According to Clear Capital, Detroit was No. 2 in all U.S. metro areas in September, its home prices up 4.3% for the quarter and 23.3% for the year.").

### The FY 2014 Reassessment

46. Given all the foregoing, and for other reasons as well, Mr. Evanko's reduction in taxable value from \$8.3 billion to \$7.3 billion for FY 2014<sup>43</sup> (determining taxes in FY 2015) appears to lack sufficient economic foundation, and also to be based on procedures other than those recommended by the Michigan State Tax Commission and generally followed in the past by Mr. Evanko himself.

47. Lack of sufficient economic foundation for the reassessment is indicated by, among other things, the fact that it was based solely on an analysis by Mr. Evanko, over a period of no more than three months, of an externally supplied, unverified sample of transactions overwhelmingly of a non-arm's-length nature, accepted as a basis for a city-wide reassessment only because he would otherwise have had no basis, at least as might ostensibly be developed in so little time and with so little expenditure.<sup>44</sup>

48. Implicit proof of the insufficiency of that approach is provided by (again among other things) the estimated time (two years) and expense ("within shouting distance" of \$6.7 million) associated with the next city-wide reappraisal scheduled, to be performed by an outside party – although both those figures are admittedly "just guesstimates.")<sup>45</sup> It is also provided by Plante Moran's independent estimate of \$23-\$46 million, and the fact that of the four proposals received by the City for the reappraisal in question, two were in the "range" of \$23 million.<sup>46</sup>

49. Being (at least nominally) a market-based approach, Mr. Evanko's FY 2014 reassessment also deviates from the replacement cost approach which he himself characterizes as "...invariably the primary valuation approach that's used for valuing residential properties for assessment purposes,"<sup>47</sup> as well as "...the primary approach for all property, commercial, industrial as well as residential,"<sup>48</sup> and the

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<sup>42</sup> City of Detroit, CAFR for Fiscal Year Ending June 30, 2012, page 21.

<sup>43</sup> Deposition of Gary Evanko, June 24, 2014, page 174, lines 10-22 and POA00725654.

<sup>44</sup> *Ibid.*, page 147, line 17 through page 151, line 3; page 152, line 16 through page 153, line 19; page 231, lines 14-17; and page 232, lines 10-12.

<sup>45</sup> *Ibid.*, page 190, line 8 through page 193, line 5, and page 194, lines 3-21.

<sup>46</sup> *Ibid.*, page 190, lines 1-12.

<sup>47</sup> *Ibid.*, page 42, line 25 through page 43, line 2.

<sup>48</sup> *Ibid.*, page 45, lines 10-12.

approach used by the City itself, at least up until the FY 2014 reassessment.<sup>49</sup> He further observes that, "...assessors are required to follow the State Assessor's Manual, and in the Assessor's Manual, the principal approach is the replacement cost, in fact the State Tax Commission publishes replacement costs that assessors are required to rely on to value properties within in the state."<sup>50</sup>

50. Given that much of the data in Detroit's assessor property improvement inventory is based on costs in the 1980's,<sup>51</sup> it is likely that use of the replacement cost approach to valuation would yield materially higher taxable values in the City than those prevailing of the last several years.

51. The foregoing considerations cast serious doubt on the economic validity of the FY 2014 reassessment. Nevertheless, even if one assumes that it will serve as the basis for the FY 2015 tax levy, it is not materially at odds with my property tax revenue forecasts, as developed below.<sup>52</sup>

#### The Sallee Report

52. In support of its property tax revenue projections, the City has submitted the expert report of Caroline Sallee. However, Ms. Sallee's report fails to convey her methodology entirely or in the usual linear way (i.e., "Here is how I calculated forecast 'X,' starting with Step 1 and taking each subsequent step in turn"). Moreover, no substantiation whatever is provided for key assumptions relating to future residential taxable value. (Sallee Report, pages 12-14.) However, subject to those obstacles to understanding (and again in the hope that more information will be forthcoming), and also based on other material the City has made available, it would appear that the following methodological errors (again, among others) contribute to its unrealistically low property tax revenue forecasts:

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<sup>49</sup> Deposition of Gary Evanko, June 24, 2014, page 46, lines 22-25.

<sup>50</sup> *Ibid.*, page 58, lines 9-14.

<sup>51</sup> *Ibid.*, page 86, line 24 through page 87, line 3.

<sup>52</sup> Note that Mr. Evanko's \$7.3 billion in taxable value corresponds roughly to the City's \$7.2 billion in value in FY 2001, when General Fund property tax revenue was \$152.8 million. Deflating that second figure by the ratio of forecast average citywide employment over the next ten years (300,000 – see Chart 17) to average monthly employment in FY 2001 (350,771) yields an estimated \$130.7 million in average employment-adjusted revenue over the FY 2014 – FY 2023 period, as compared my forecast of \$138.8 million in average revenue (see below), a difference of only 5.8 percent.

Sources: City of Detroit State Equalized Valuations, [http://www.detroitmi.gov/Portals/0/docs/budgetdept/2012-13%20Redbook/Charts/XX\\_State%20Equalized%20Valuations.pdf](http://www.detroitmi.gov/Portals/0/docs/budgetdept/2012-13%20Redbook/Charts/XX_State%20Equalized%20Valuations.pdf); City of Detroit Comprehensive Annual Financial Report for FY 2001, page 66; and <http://www.bls.gov/data/#unemployment> and Chart 18.

(a) Ms. Sallee relies on the FY 2014 reassessment, in itself unreliable (see above), as a basis for forecasting aggregate residential taxable through FY 2023 (Sallee Report, page 14) – layering on top of its effect (a 20.5 percent decline in value), her conjecture as to the result of a more comprehensive reassessment to be completed at the end of this decade (another 15.0 percent decline in value – Sallee Report, page 14). This assumption is contradicted by Mr. Evanko testimony: “... as I sit here today, I have no idea what direction the assessments are heading next year.”<sup>53</sup>

(b) Despite her citation of the Case-Schiller Home Price Index for Detroit as data considered (Report at page 5), Ms. Sallee relies instead on average home selling prices in estimating the disparity between the market value of the housing stock (as adjusted) and residential taxable value. (Sallee Report, page 13.) Related errors include mischaracterization of average home selling prices as “average existing home prices,” further implying that properties sold constitute a representative sample of all properties in the housing stock (Sallee Report, page 13), and restriction of the subject analysis to a period far too short and unrepresentative of long-term conditions to be reliable (2006-2013 – Sallee Report, page 13).

(c) Disregarding an apparent error in the related narrative, Ms. Sallee seems to have developed a forecast of gross additions to the taxable value of the City’s housing stock which, among other things, assumes: (1) no significant appreciation in per-parcel values from FY 2013 through FY 2023, despite substantial evidence to the contrary (see earlier); (2) no significant increase in construction costs from “2012 and 2013” to FY 2023, despite a 6.5 percent increase in new home prices nationwide in 2013, and increases in every year but three since 1964;<sup>54</sup> and (3) no significant increase in the annual amount of new construction either in the City or Wayne County from “2012 and 2013” to FY 2023, despite a cyclical recovery in residential construction nationwide that has been underway for quite some time.<sup>55</sup> (Sallee Report, page 12.)

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<sup>53</sup> Deposition of Gary Evanko, June 24, 2014, page 201, lines 5-7.

<sup>54</sup> See relevant Census Bureau data at [https://www.census.gov/construction/cpi/pdf/price\\_uc.pdf](https://www.census.gov/construction/cpi/pdf/price_uc.pdf).

<sup>55</sup> See relevant Census Bureau data at <https://www.census.gov/econ/currentdata/dbsearch?program=RESCONST&startYear=1959&endYear=2014&categories=APERMITS&dataType=TOTAL&geoLevel=US&adjusted=1&notAdjusted=0&errorData=0>.

(d) Ms. Sallee also apparently assumes that, in the “no restructuring” scenario,” eighty percent (40%/50%) of all properties owned by currently delinquent taxpayers will never again generate revenue for the City. (POA00275524, paragraph (3).)

(e) Ms. Sallee erroneously concludes that pending personal property tax legislation will reduce tax collections from commercial and industrial personal property by ten percent beginning in FY 2015. (Sallee Report, page 8.) Characterizing that estimate as “ridiculous,” Mr. Evanko estimates the effect at 0.7 percent.<sup>56</sup> Ms. Sallee’s error here would appear to result from a failure to consider limitations on the tax exemptions in question, and offsetting subsidies to be provided affected municipalities by the State.<sup>57</sup>

(f) Based on the decline in commercial taxable value from FY 2008 to FY 2013, Ms. Sallee assumes that that value will continue to decline through FY 2018 (Sallee Report, page 15), improperly using a recession-impacted period as the basis for forecasting values in a period of economic recovery.

#### ***FTI’s Property Tax Revenue Forecasts***

53. Three alternative methods can be applied to arrive at alternative property tax revenue forecasts, all producing estimates that are, in my view, more consistent with past history and current economic trends than those proffered by the City. These forecasts are conservative, and property tax revenues over the ten-year period could well be greater.

54. The first entails application of an autoregressive (AR) statistical model of revenue based on its behavior since 1980. The AR model is essentially a refined form of extrapolation from past history, and a sub-class of “time series” models that are widely employed by economists, government finance personnel and others in forecasting economic and financial values. For example, in a publication in their “Recommended Budgeting Practices” series, the Government Finance Officers Association (GFOA) devotes several pages to an explanation of time-series models, as well as providing guidance as to their application.<sup>58</sup>

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<sup>56</sup> Deposition of Gary Evanko, June 24, 2014, page 223, line 21 through page 224, line 4.

<sup>57</sup> Michigan State Senate Fiscal Agency, “Personal Property Tax Phase-Out Bill Analysis,” February 19, 2013.

<sup>58</sup> Barry Blom and Salomon Guajardo, “Revenue Analysis and Forecasting,” GFOA Budgeting Series Volume 2, 2001, pages 44-50. See also Salomon Guajardo and Rowan Miranda, “An Elected Officials Guide to Revenue

55. The forecasts generated by our AR model for FY 2015-FY 2023 are shown in Chart 14 and Schedule 8.0.<sup>59</sup> For most of the period, they exceed the City's forecasts by roughly forty percent.

56. Under a second forecasting approach, tax revenue is assumed to increase at the same rate as the Detroit Consumer Price Index from FY 2013 forward, with that rate itself equaling the rates forecast by the Michigan House Fiscal Agency for calendar years 2015 and 2016<sup>60</sup> and the forecast rate for 2016 carried forward through 2023 (see Schedule 8.0). That last rate – 1.80 percent per year – in my view constitutes a conservative forecast of the average rate of increase in real and personal property values in the City in coming years, given both recent home price trends (see above) and a presumption of continued modest recovery in the City's economy.

57. The forecasts generated by this CPI-based approach are illustrated in Chart 15. Note how closely they coincide with those generated by the ARMA time-series model.

58. A third forecasting approach posits a local economic recovery sufficient to restore General Fund-related property tax revenue to its pre-recession level by FY 2023. (Chart 16 and Schedule 8.0.) While generating the highest values of the three approaches, this is not an unreasonable expectation, given that average annual revenue from FY 2014 through FY 2023 as forecast under this method – \$154.5 million – is virtually identical to annual revenue for FY 2008 through FY 2013 (as currently estimated by the City) – \$154.3 million.<sup>61</sup> Moreover, extrapolation of the upward trend in citywide employment from January 2012 through March of this year indicates a restoration of the City's pre-recession employment level by 2023 (Chart 17), with all that implies about the local demand for property, and goods and services in general.

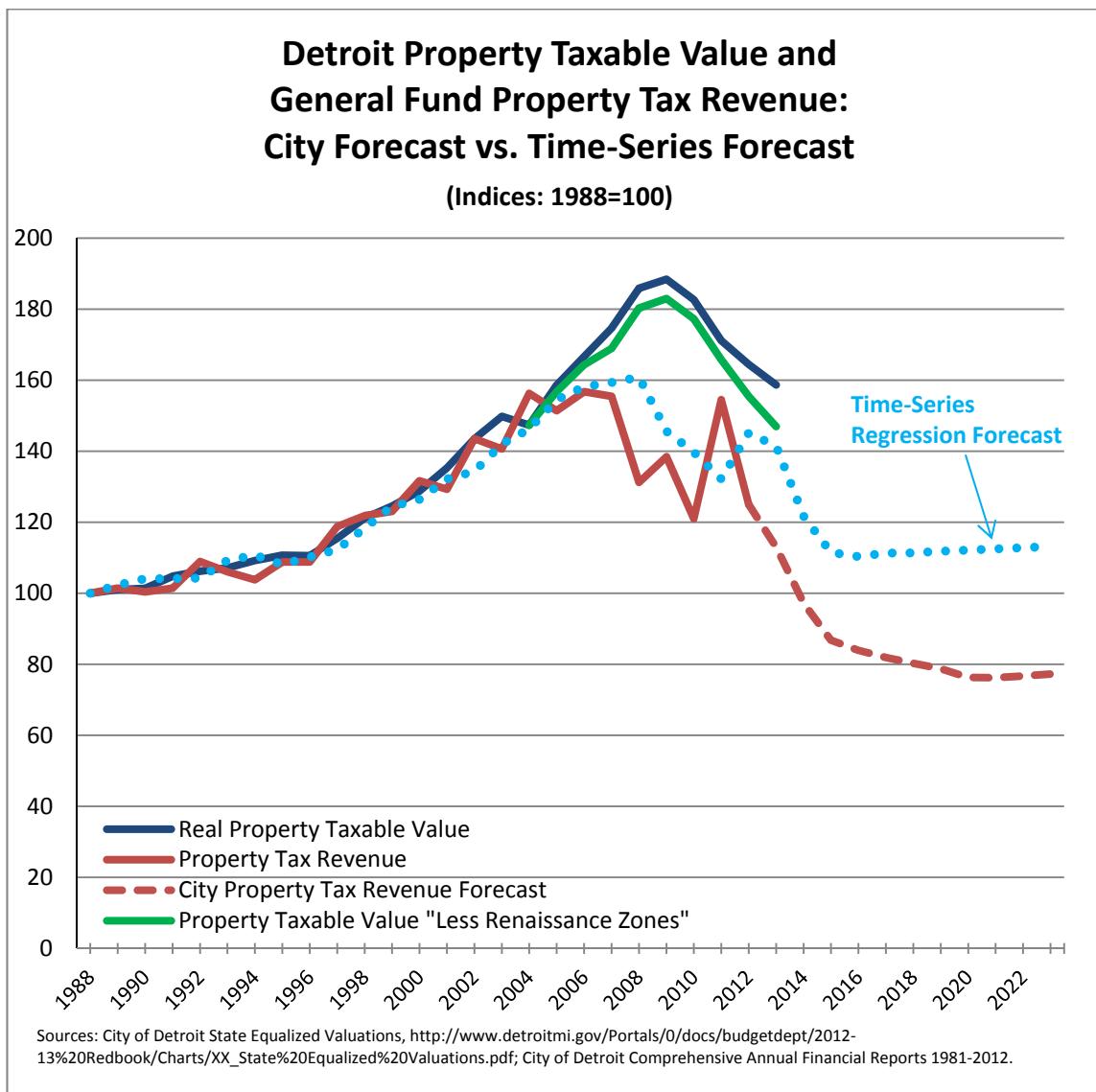
Forecasting," GFOA, 2000, pages 41-43, and, more broadly, Robert S. Pindyck and Daniel L. Rubenfeld, *Econometric Models and Economic Forecasts*, Fourth Edition (Boston: Irwin McGraw-Hill, 1998), pages 521-546, with 535-538 being most relevant to the instant case.

<sup>59</sup> In this and subsequent charts of this type, the City's current FY 2013 forecast is assumed to be accurate, and forecast revenue for FY 2014 is based on unaudited results for the first nine months of the year, multiplied by the ratio of forecast full-year, total property tax revenue to revenue for the first nine months, as estimated by the City in July of last year. Sources: City of Detroit, Office of the Emergency Manager, "Quarterly Report with Respect to the Financial Condition of the City of Detroit," April 15, 2014, Appendix B, and Disclosure Statement, Doc 4391-2, page 14 of 212.

<sup>60</sup> Michigan House Fiscal Agency, "Economic Outlook and Revenue Estimates for Michigan, FY 2013-14 through FY 2015-16," January 2014, page 2.

<sup>61</sup> Nor does this forecast method assume any improvement in tax assessment and collection procedures relative to those now prevailing, however reasonable such an expectation may be.

Chart 14



SAS Output					
Conditional Least Squares Estimation					
Parameter	Estimate	Standard Error	t Value	Approx Pr >  t	Lag
MU	759,968.8	1,431,284.8	0.53	0.5992	0
AR1,1	-0.45798	0.16395	-2.79	0.0089	1

Constant Estimate	1,108,018
Variance Estimate	1.413E+14
Std Error Estimate	11,886,998
AIC	1,170.79
SBC	1,173.78
Number of Residuals	33

Chart 15

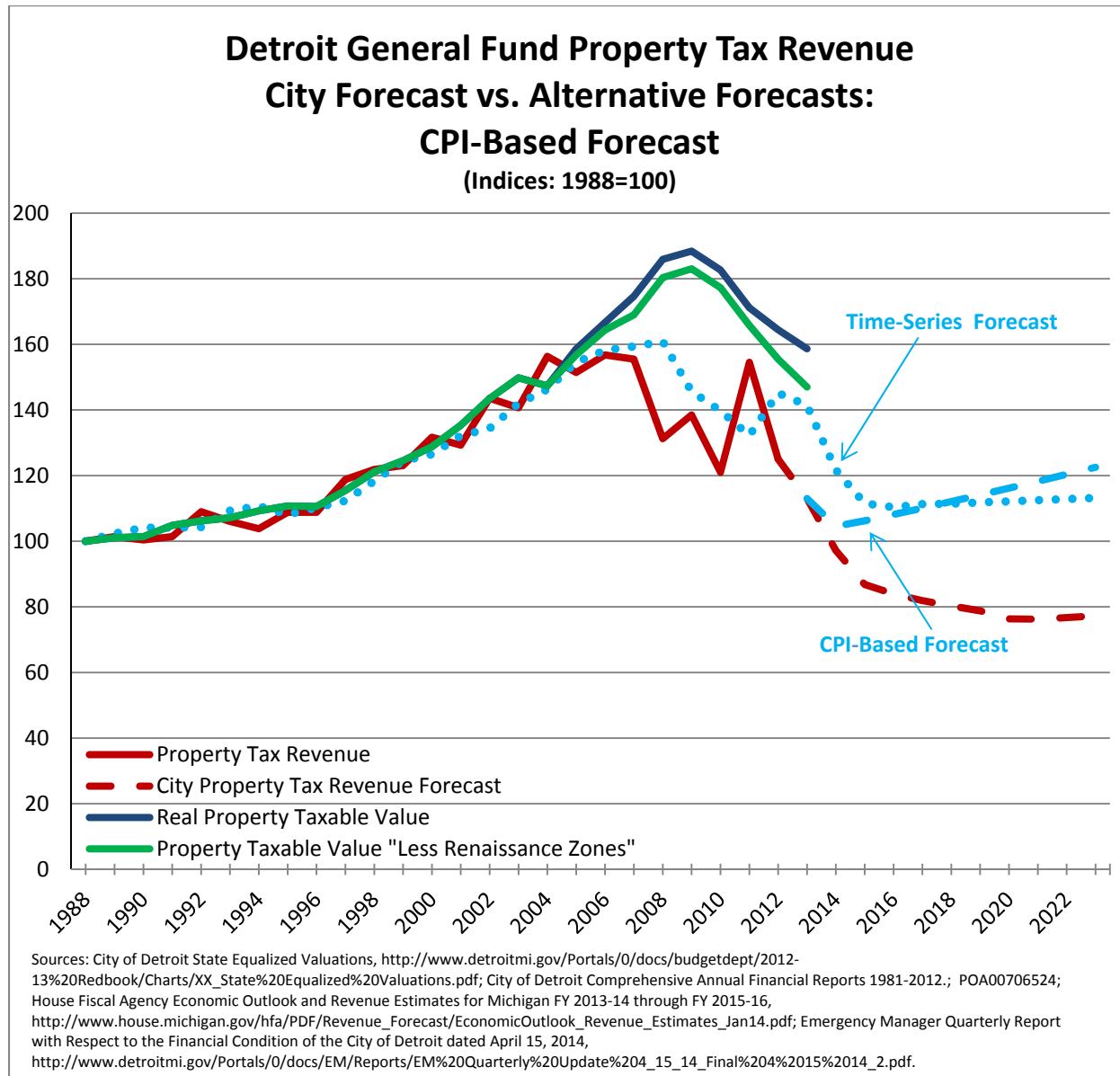


Chart 16

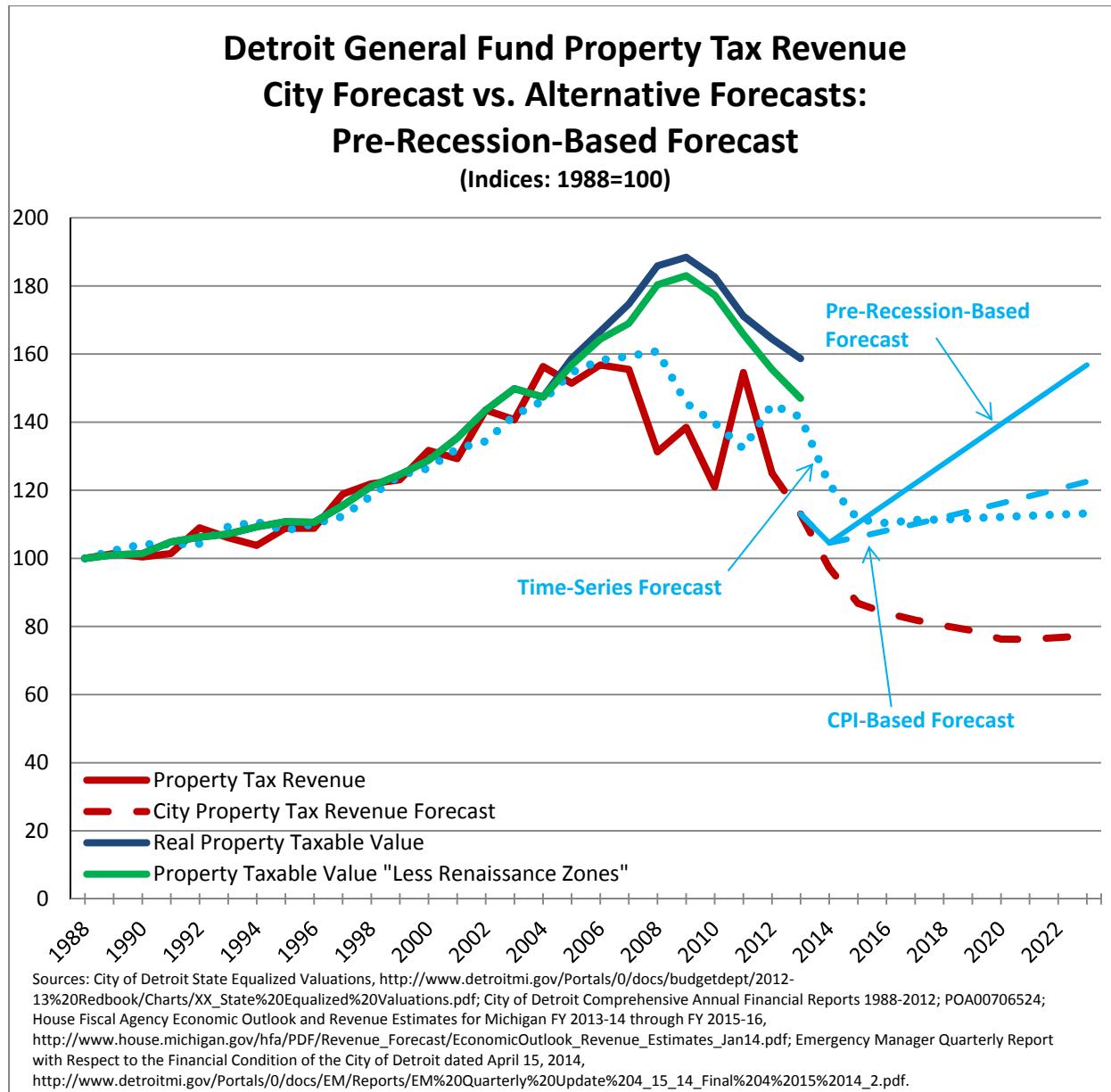
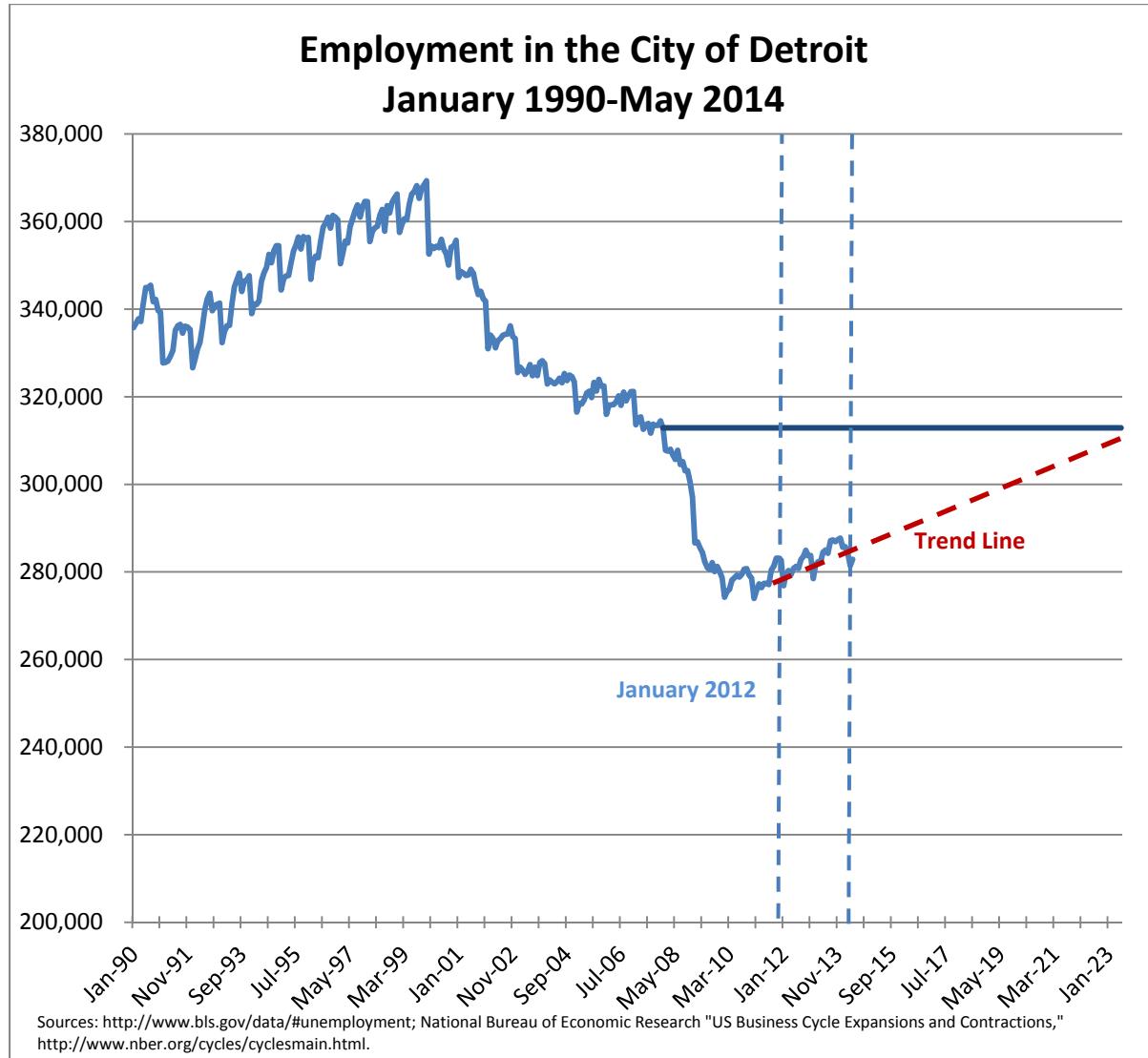


Chart 17



59. From the three sets of forecasts described above – high, low and slightly higher than “low” – mean (average) forecasts of General Fund-related property tax revenue were derived, giving each set of forecasts equal weight.<sup>62</sup> (Chart 18 and Schedule 8.0.) Significantly, these mean forecasts lie well within a ninety-percent confidence interval for forecast values, as derived from the time-series analysis (Chart 19), while the City’s forecasts generally do not. Thus, based on history as captured by the ARMA model, there is less than a five percent chance that most of the City’s forecasts will be realized, while none of mine can be ruled out on this basis.

60. As noted above, despite the fact that these forecasts are greater than the City’s, they still likely understate future property tax revenues. For example, they do not fully take into account significant opportunities to improve property tax collections.

#### ***The City’s Income Tax Revenue Forecast***

61. Among many other things, the City’s income tax revenue forecasts essentially assume the status quo with respect to City residents who work outside of the City and thus, at present, are both able and willing to evade their income tax obligations. However, the City has proposed working with the State to implement legislative changes that would require income tax withholding by these individuals’ employers. Indeed, in the Financial Stability Agreement it executed with the State, the State agreed to attempt to facilitate passage of such legislation:

“The Treasury Department will assist the city in maximizing revenues collected under the City income tax. This will include technical assistance to modernize processing, enhance enforcement, and improve collections. The Treasury Department will assist the City in preparation of draft legislation to require withholding of City Income Taxes for City residents working outside the City. Additionally, the Treasury Department will explore the possibility of enabling

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<sup>62</sup> While to date there has been far-from-full discovery of the City’s own forecast methods at this juncture, it bears repeating that realization of the City’s forecasts requires either (a) a fifty percent reduction in property values, and elimination of the gap between taxable value and appropriate tax payments (payment gap), or (b) persistence of some portion of the payment gap, and a correspondingly lesser but still very large downward revision of property values (minimum of roughly 25 percent, if the payment gap is not reduced at all). Whatever the scenario assumed by the City, it must document the validity of both its forecast property revaluation and its forecast payment gap (and thus, implicitly, its assumptions with respect to taxpayer ability-to-pay and the effectiveness of tax assessment and collection procedures). This is particularly true given the economic evidence discussed above, as points to a recovering economy and housing market and downward bias in the City’s apparent perception of its own future.

Chart 18

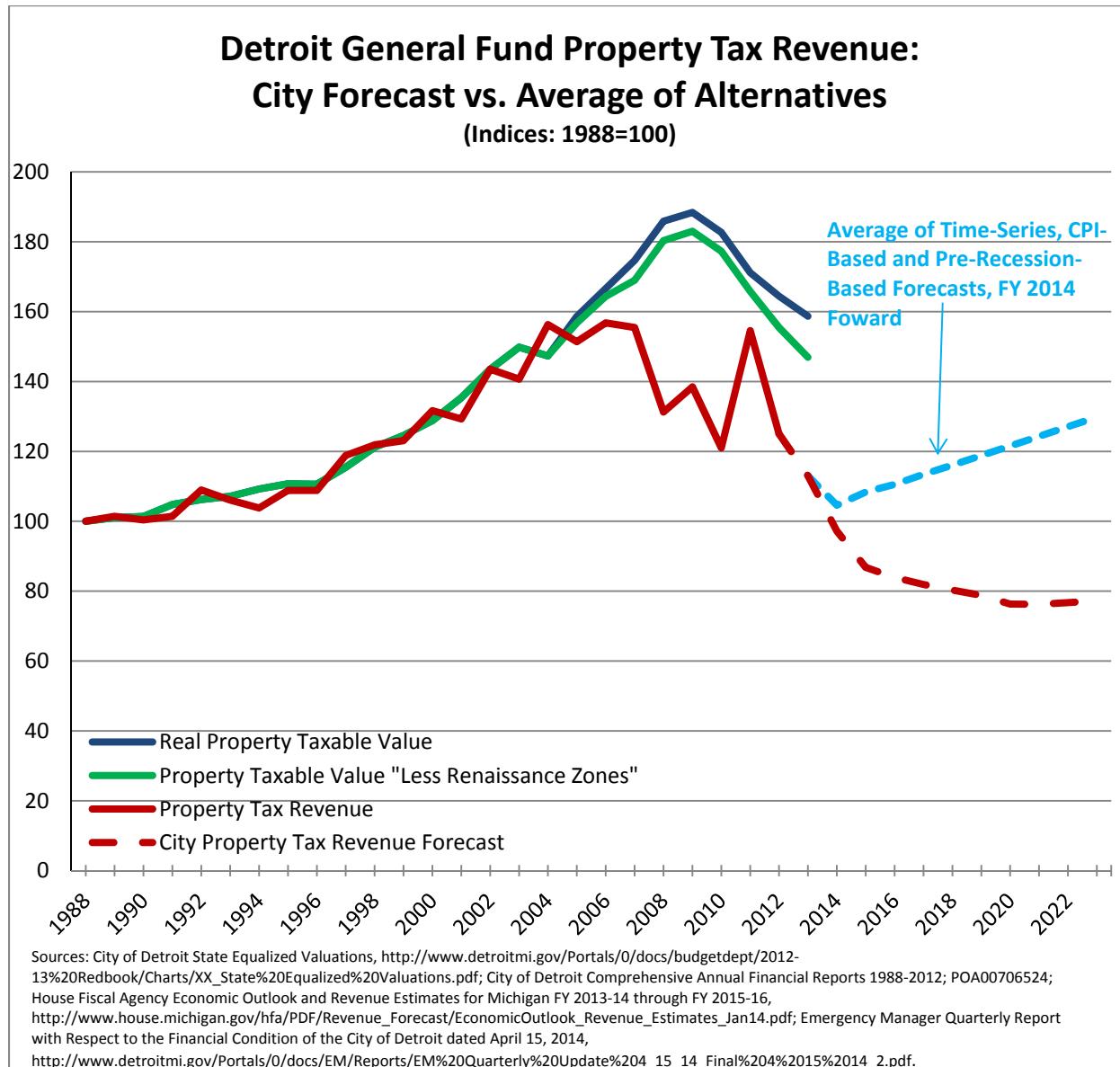
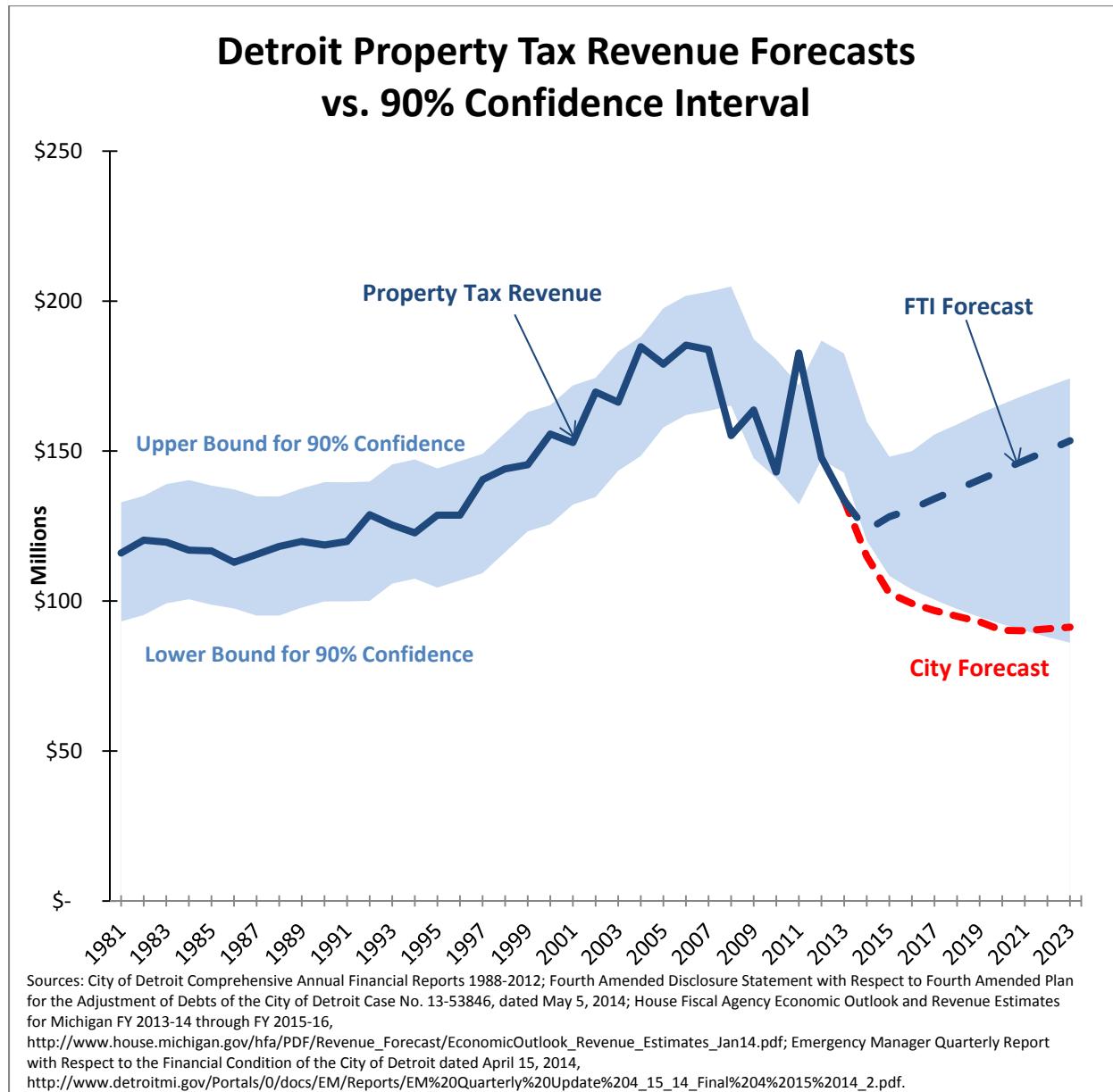


Chart 19



the collection and distribution of the City income tax in conjunction with the collection and distribution of State income tax.”<sup>63</sup>

62. In its Proposal to Creditors, the City also represented that it, “...intends to pass legislation to require withholding of City income taxes for reverse commuters.”<sup>64</sup> And in its Plan of Adjustment, it has proposed taking measures to ensure the collection of this tax, measures which the Governor has publicly indicated are consistent with the Financial Stability Agreement and with what is being planned.<sup>65</sup> Improved collections of amounts owed might increase City revenues considerably.

63. In addition, the City has an agreement-in-concept with the State to combine collection of city income taxes with the collection of State income taxes, which will likely both increase revenues and decrease costs. Under this scenario, the State will collect and enforce the City income tax, which should reduce costs for the City.<sup>66</sup>

64. Given what appears to be a widespread failure of reverse commuters to comply with their income tax obligations, improved collection should increase City revenues considerably.

#### ***Revenue Sharing***

65. There can be little question that the State’s decision to reduce the share of sales and use tax revenue made available to the City’s General Fund has been a key cause of Detroit’s fiscal problems. As the City’s Disclosure Statement observes, there have been “significant cuts by the State.”<sup>67</sup> Under the State’s revenue sharing program, the City of Detroit and other municipalities collect sales and use taxes that are funneled to the State, which in turn distributes a portion back to the City and other

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<sup>63</sup> Financial Stability Agreement, April 9, 2012, ¶ 2.5(c).

<sup>64</sup> City of Detroit Proposal for Creditors, June 14, 2013, page 81.

<sup>65</sup> See “Bankruptcy Exit Plan Explores Collecting Taxes from Residents Working Outside Detroit,” Detroit News, February 24, 2014, <http://www.governing.com/news/headlines/Bankruptcy-Exit-Plan-Explores-Collecting-Taxes-from-Residents-Working-Outside-Detroit.html> (“A study released by consultants McKinsey & Co. estimated that uncollected income taxes from Detroit residents working outside the city, or reverse commuters, totaled more than \$140 million in 2009... On Friday, a spokeswoman for Gov. Rick Snyder said Orr’s current plan is consistent with what was included in the consent agreement. ‘It’s just a way for the state to help assist the city in ensuring effective and streamlined tax collection and compliance with existing laws and provisions,’ said Sara Wurfel. ‘Details and particulars are in the early stages and will need to be worked out.’”).

<sup>66</sup> Deposition of John Hill, July 18, 2014, page 139, line 10 through page 145, line 7 and page 241, lines 6-19.

<sup>67</sup> Disclosure Statement, Doc 4391, page 128 of 197.

municipalities. A portion of this revenue sharing is required by the Michigan Constitution. However, additional sums are governed by State statute.

66. While such revenue has more than quintupled since 1980, increasing by over four hundred percent, the portion of it available to the City's General Fund has hardly grown at all.<sup>68</sup>

67. Thus, the State has retained an increasing portion of sales and use tax revenue to fund its own budget. As a result, not only Detroit but other municipalities in the State have found themselves under greater financial stress than would have otherwise been the case. Indeed, it is striking that the State proceeded to withhold hundreds of millions of dollars from the City, not long thereafter declaring it to be in a state of "fiscal emergency" requiring the appointment (by the State) of an Emergency Manager who (along with the Governor) then approved the present filing, declaring the City insolvent and seeking to wipe out hundreds of millions of dollars of obligations to the City's creditors – obligations that to some significant extent might otherwise become de facto obligations of the State.<sup>69</sup>

68. In view of likely increasing political pressure to restore some of the balance in Revenue Sharing as between the State and municipalities (already evident in the Executive Budget Recommendation), I think it reasonable to consider the City's Revenue Sharing projections to be overly conservative. However, because of the attendant uncertainties, I do not offer alternative projections.

#### ***Other Revenue***

69. The City's revenue forecasts do not fully take into account the potential for privatization of City services, or the shifting of such services to other government entities over the next ten years. As the City observed in its proposal to creditors, "The City will evaluate all options, including preserving the status quo, entering into partnerships with other public entities, outsourcing of operations and transferring non-core assets to other private or public entities in sale, lease or other transactions."<sup>70</sup> For

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<sup>68</sup> Sources: Michigan Department of Treasury, Sales and Use Tax 2012 Report, Exhibit 3, [http://www.michigan.gov/documents/treasury/SalesUseTaxReport2012\\_432538\\_7.pdf](http://www.michigan.gov/documents/treasury/SalesUseTaxReport2012_432538_7.pdf), and City of Detroit, Comprehensive Annual Financial Reports, Fiscal Years 1981 through 2012.

<sup>69</sup> City of Detroit Office of Emergency Manager Kevyn D. Orr Financial and Operating Plan, May 12, 2013, page 20 ("Under the Emergency Manager's leadership, the City will continue to work with the State to address these important issues. The State's statement of support for many of these initiatives is documented in the Consent Agreement.").

<sup>70</sup> City of Detroit Proposal for Creditors Executive Summary, June 14, 2013, page 46.

example, the City is considering the privatization of its Auto Parking System (APS).<sup>71</sup> Similarly, the City may enter into a public-private partnership with respect to the DWSD, which may enhance revenues significantly.<sup>72</sup> The City is also investigating merging the Department of Transportation with a private carrier or shifting it to a regional transit authority.<sup>73</sup>

70. Increases in revenue from grants from other government entities such as the federal or State governments,<sup>74</sup> as well as private entities, are another source of potential revenue. For example, the federal government recently announced an award of \$300 million in public and private aid to the City, a portion of which will be earmarked for blight removal efforts.<sup>75</sup> JP Morgan Chase & Co. recently announced \$100 million in funds, which included funds for blight elimination.<sup>76</sup> The Financial Stability Agreement between the City and State indicated that the State would assist the City in securing and

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<sup>71</sup> In its Disclosure Statement, the City states: "At the request of the Emergency Manager, the City has been exploring a potential monetization of the assets constituting the Automobile Parking Fund. To this end, the City has retained a parking specialist to conduct due diligence and produce a report on the long-term value potential of the parking assets currently held by the City. This report is expected to serve as a basis for the solicitation of potentially interested bidders for the parking assets, and the City anticipates that the transaction may close during Fiscal Year 2015." Disclosure Statement, Doc 4391, page 109 of 197.

<sup>72</sup> Disclosure Statement, Doc 4391, page 163 of 197.

<sup>73</sup> City of Detroit Proposal for Creditors, June 14, 2013, page 74 ("City could transition DDOT to new Regional Transit Authority ('RTA') at some point in the future... DDOT could be merged with SMART or another private carrier prior to potential transition into RTA... City of Detroit would have to subsidize third party operations, which subsidy may be less than current general fund subsidy."). See also City of Detroit, Operational Restructuring Summary, November 11, 2013, page 44 ("The excess solid waste assets -- consisting mainly of the related fleet of trucks -- will be monetized in the 2nd half of calendar year 2014 (likely in FY 2015).").

<sup>74</sup> See Deposition of John Hill, July 18, 2014, page 29, line 18 through page 30, line 13, and page 258, line 11 through page 259, line 4.

<sup>75</sup> Disclosure Statement, Doc 4391, page 176 of 197. See also *ibid.* ("[T]he Michigan State Housing Development Authority has allocated \$52 million to the City (out of \$100 million received from the U.S. Treasury from its 'Hardest Hit Fund'). These funds -- administered through the Detroit Land Bank Authority (in conjunction with the Michigan Land Bank) -- will allow for blight elimination on 4,000 to 6,000 publicly owned residential structures over a 15-month period. Other complementary blight elimination efforts include: (a) a pilot program implemented by a nongovernmental non-profit agency (addressing blight in the Eastern Market and Brightmore sections of the City); (b) the 'Hantz Woodlands' urban farming project, in connection with which a 150-acre, 1,500-parcel tract of land on the City's lower east side has been acquired by a private party and is being cleared of blight and maintained and (c) the devotion of \$12 million in recently repurposed HUD funds for the targeting of commercial demolition during Fiscal Year 2014.").

<sup>76</sup> Press Release, JPMorgan Chase & Co. Announces \$100 Million Commitment to Support Detroit's Economic Recovery, May 21, 2014.

administering grants for that purpose.<sup>77</sup> In its proposal to creditors, the City reaffirmed that it would seek "...grant funds to pay for the demolition of abandoned structures."<sup>78</sup>

71. The City also has acknowledged that it has done a poor job of maximizing potential grant monies; that it has lost grant funds for failure to spend them; and that there is an active effort to increase revenues from this source.<sup>79</sup> Nonetheless, the City apparently projects no improvement in this area and actually projects that grant revenues will decrease.<sup>80</sup>

#### The City's Own Assessment

72. Indeed, the City implicitly assumes that it will have surplus revenues. For example, it has repeatedly alluded to the fact that it will *reduce* taxes, including both income and property taxes.<sup>81</sup> It

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<sup>77</sup> Financial Stability Agreement, April 9, 2012, ¶2.7(c) ("The Treasury Department, at the City's request, will provide technical assistance and support to the City in pursuing and administering federal grant funds to pay for the demolition of abandoned structures.").

<sup>78</sup> City of Detroit Proposal for Creditors, June 14, 2013, page 67. See also Detroit Blight Removal Task Force Plan, May 2014, pages 248-50 ("The city should aggressively pursue possible funding, resources and partnership opportunities with the Department of Homeland Security (including Federal Emergency Management Agency), U.S. Environmental Protection Agency, and other federal agencies, as well as Michigan Department of Environmental Quality, and the Southeast Michigan Council of Governments and Detroit Water and Sewerage Department, to remove blight and create sustainable green infrastructure.... A central fund should be established to receive both corporate and private monetary donations to support blight removal work.... [T]he city should appeal to banks to use their Community Reinvestment Act funding to support blight elimination work."); *Ibid.*, page 294 ("The DLBA should advocate for the allocation of additional HHF funds to Detroit, after demonstrating success in deploying current Hardest Hit Funds. In addition to State of Michigan requests, our congressional delegation should propose that Detroit be able to apply for any unused program dollars, not already assigned to Michigan."); *Ibid.*, page 296 ("The DLBA is a source of local bonds that should be explored. Beyond local bonds, the city could advocate for the County or State to float a bond to cover portions of blight elimination.").

<sup>79</sup> Deposition of John Hill, July 18, 2014, page 25, line 9 through page 29, line 25.

<sup>80</sup> Disclosure Statement, Doc 4391, page 186 of 197.

<sup>81</sup> Stating that, for example it "...may rationalize the nominal tax rates currently assessed by the City to bring them in line with those assessed by surrounding localities." Disclosure Statement, Doc 4391, page 97 of 197. "The City is considering the possibility of lowering selected income and property tax rates to levels that are competitive with surrounding localities in order to reverse the City's population decline, foster job growth and expand the overall tax base. Although tax rate reform likely would cause tax revenues to decrease somewhat in the near term -- which decreases may be partially offset by improved collection efforts -- the City believes that such reform would encourage long-term growth and anticipates that such reform would be revenue-neutral within a reasonable period of time. On January 27, 2014, the City announced a major reform in property tax assessments that will reduce the residential property assessment for the great majority of Detroiters and result in a tax cut ranging from 5 to 20 percent in 2014.... The City anticipates a reduction in property tax revenue of about 13% for Fiscal Year 2015." *Ibid.*, page 183 of 197. Also see City of Detroit Proposal for Creditors, June 14, 2013, page 92. ("Income tax policy is under review and income tax rate could be reduced as a part of the final restructuring plan.").

has already reduced property tax assessments "to encourage home ownership."<sup>82</sup> The fact that the City contemplates reducing tax rates suggests that its vision of its future may be at variance with the forecasts offered in this proceeding.

73. Similarly, when the City made its proposal to creditors for restructuring outside of bankruptcy, it recognized that it might well receive grants for blight reduction from the State of Michigan and the federal government, and accordingly provided that 75.0 percent of such funds be returned to note holders.<sup>83</sup> Further, its Proposal for Creditors indicated that there may be additional revenues from future asset sales.<sup>84</sup>

## POTENTIAL TAX MEASURES

### ***Guidance in Setting Tax Rates***

74. As noted above, another option available to the City is to increase taxes. There are well-established economic principles that may be consulted in determining appropriate tax increases. On the principal that they should not be needlessly burdensome, some guidance in setting tax rates can be provided by considering ability to pay, or the resulting overall tax burden relative to the burdens in other cities confronting at least roughly similar fiscal problems. Here, both factors are considered in arriving at possible magnitudes for a ten-year property tax increase in the City, and the imposition of an added tax (beyond the current 1.2 percent income tax) on those living outside the City but working in it.

#### Ten-Year Property Tax Increase

##### *Relative to Discretionary Expenditure*

75. Limiting a potential ten-year property tax rate increase to selected fractions of average entertainment expenditure for a very-low-income family (average annual income of \$9,988) with a home of median value as of 2012<sup>85</sup> (\$989<sup>86</sup>) yields residential tax rate increases ranging from 7.6 to 12.6

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<sup>82</sup> Detroit to Reduce Tax Assessments to Encourage Home Ownership, January 27, 2014, [http://blog.mlive.com/news/detroit\\_impact/print.html?entry=/2014/01/detroit\\_to\\_reduce\\_tax\\_assessme.html](http://blog.mlive.com/news/detroit_impact/print.html?entry=/2014/01/detroit_to_reduce_tax_assessme.html)

<sup>83</sup> City of Detroit Proposal for Creditors, June 14, 2013, page 108. In contrast, in Chapter 9, the City appears to be taking the position that it will simply keep the creditors' funding along with any additional money it receives from the State and federal government to engage in even more unwarranted blight reduction.

<sup>84</sup> *Ibid.*

<sup>85</sup> \$39,100 based on homeowner estimates. Source: U.S. Department of Commerce, Bureau of the Census, American Housing Survey, Selected Housing Characteristics, 2012 American Community Survey 1-Year Estimates,

mills, above the current 19.95 mills. (See Table 2 on the following page, Schedule 7.0, and pages one and two of Exhibit 9.) Entertainment expenditure of course increases with income; for example, for families with an average income of \$24,834 in 2012 – close to Detroit median household income of \$23,600 in the same year<sup>87</sup> – the average amount spent on entertainment was \$1,481.<sup>88</sup> Thus, matching median Detroit home value to median Detroit income, rather than assuming lesser income as is done Table 2, produces considerably lower hypothetical tax burdens than the percentages shown in the second column of that table, as well as lower burdens relative to income overall.

76. Because property tax payments are tax-deductible and any increases would be to some extent offset by a lesser federal income taxes for some residents, the incremental property tax burdens shown in Table 2 (as “annual yields”) would be less burdensome than is suggested by this analysis.

#### *Inter-City Tax Burden Comparison*

77. Exhibit 2 consists of two tables excerpted from a study of comparative City-specific tax burdens as of 2012 for a hypothetical family of three, as estimated by the Chief Financial Officer of the Government of the District of Columbia.<sup>89</sup> Expressed as a percentage of gross family income, burdens are shown separately for a family with a \$50,000 income and a family with a \$25,000 income.<sup>90</sup> (The study also estimates burdens for higher-income families.) In considering these tables, and Detroit’s ranking in terms of burden both actually and hypothetically (see below), it should be borne in mind that many of the cities listed are much smaller than Detroit, both in population and geographic size, and also have lower relative operating and capital costs due to, among other things, newer infrastructure, milder

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Detroit city, Michigan. Note that those of very low income are apt to have homes, or rental apartments, of less than median value, and therefore lower tax liabilities than indicated in Table 1.

<sup>86</sup> Bureau of Labor Statistics, “Consumer Expenditures in 2012,” Report 1046, March 2014, page 8.

<sup>87</sup> Bureau of the Census, 2012 American Community Survey, 1-Year Estimates, Selected Economic Characteristics of Detroit city, Michigan.

<sup>88</sup> Bureau of Labor Statistics, “Consumer Expenditures in 2012,” Report 1046, March 2014, page 9.

<sup>89</sup> Natwar M. Gandhi, “Tax Rates and Tax Burdens in the District of Columbia – A Nationwide Comparison,” December 2013. The estimates in a prior edition of this report covering the year 2009, comparable to those cited here, also form the basis for two tables in the *Statistical Abstract of the United States* for 2012 (U.S. Department of Commerce, Bureau of the Census), “State and Local Government Finances and Employment,” page 284, available at <http://www.census.gov/compendia/statab/2012/tables/12s0448.pdf>.

<sup>90</sup> For families at this lower income level, who are assumed to rent, property taxes are estimated to account for twenty percent of rent. See Gandhi, “Tax Rates and Tax Burdens...,” September 2012, page 5.

**Table 2**

<b>PERSPECTIVE ON ECONOMIC BURDENS IMPOSED BY TAX MEASURES OF VARYING MAGNITUDE</b>				
<b>TEN-YEAR PROPERTY TAX INCREASE: HOMEOWNER BURDEN</b>				
Rate Increase in Mills	Annual Yield on \$39,100 Home	Percentage of Average Annual Expenditure on Entertainment, 2012, \$10K Income Family	Change in City Ranking: Overall Tax Burden for <u>\$25K</u> Income Family	City Ranking: Overall Tax Burden for <u>\$50K</u> Income Family
7.6	\$148	15%	18 <sup>th</sup> to 14 <sup>th</sup>	No Change (6 <sup>th</sup> )
10.1	\$198	20%	18 <sup>th</sup> to 13 <sup>th</sup>	No Change (6 <sup>th</sup> )
12.6	\$247	25%	18 <sup>th</sup> to 12 <sup>th</sup>	No Change (6 <sup>th</sup> )
<b>INBOUND COMMUTER TAX</b>				
Annual Amount per Commuter	Percentage of Avg. Income, 2012 (\$48,880) <sup>a</sup>	Percentage of Average Annual Expenditure on Entertainment, 2012, \$45K Income Family	Change in City Ranking viz. the Ten Taxing Commuters, in Terms of Burden	
\$147	0.30%	8%	6 <sup>th</sup> to 5 <sup>th</sup>	
\$244	0.50%	13%	6 <sup>th</sup> to 4 <sup>th</sup>	
\$342	0.70%	18%	6 <sup>th</sup> to 4 <sup>th</sup>	

<sup>a</sup> Based on average annual wages and average annual hours for employees in the Detroit-Livonia-Dearborn, Michigan Metropolitan Division in 2012.

Sources: Exhibit 3 for city commuter tax rates; U.S. Department of Labor, Bureau of Labor Statistics, "Consumer Expenditures in 2012," Report 1046, March 2014, pages 8 and 9; and U.S. Department of Labor, Bureau of Labor Statistics, "Occupational Employment and Wages in Detroit-Livonia-Dearborn, Mich. Metropolitan Division - May 2012," News Release 13-757-CHI, May 17, 2013.

climactic conditions,<sup>91</sup> and (presumptively) lower levels of unionization statewide, insofar as that may affect the bargaining power of municipal employees and the cost of contracted services (see Exhibit 4, and, more broadly, the Bureau of Labor Statistics release from which it is excerpted<sup>92</sup>).

<sup>91</sup> Significant, for example, in relation to road maintenance costs.

<sup>92</sup> Bureau of Labor Statistics, "Union Members – 2013," USDL-14-0095, January 24, 2014.

78. Given the ratio of General Fund-related property taxes to total property taxes levied in the City,<sup>93</sup> one can determine the effect of alternative ten-year increases in the former on Detroit's ranking among the cities evaluated, in terms of overall City-specific tax burden. These effects are described in the fourth column of Table 2. In the case of families with an annual income of \$25,000 – again, close to Detroit's median – the alternative ten-year property tax increases contemplated move the City from eighteenth place, with a burden of 13.7 percent of income, to fourteenth, thirteenth, or twelfth place, with burdens of 14.3, 14.5, and 14.7 percent respectively, depending on the size of the tax increase. (See Exhibit 2 and page three of Exhibit 9, which, like page four, illustrates the result of the middle of those figures.)

79. In the case of families with an annual income of \$50,000, the alternative ten-year property tax increases contemplated do not affect the City's ranking, keeping it in sixth place, with increases in overall burden from 13.0 percent to 13.2, 13.3, or 13.4 percent – all lower than burdens in Columbus, Baltimore, Milwaukee, Philadelphia and Bridgeport. (See Exhibit 2 and page four of Exhibit 9.)

#### *Mitigation of the Burden on Low-Income Families*

80. As of 2012, 37.7 percent of the City's families had incomes below the poverty level.<sup>94</sup> However, under an extant City program, all such families – and households – are eligible to receive a full property tax exemption (Exhibit 5, and the City Property Assessment Division<sup>95</sup>), mitigating the burden imposed on low-income families (or households) by any property tax increase.

81. Further, even if all homes *and* apartments of less than median value were exempted from a property tax increase regardless of the income of their owner, the related reduction in revenue would be limited, as can be seen from the following rough calculation, based on 2012 Census home values:

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<sup>93</sup> According to the office of the Wayne County Executive, the County billed a total of \$549,328,138 in property taxes in the City of Detroit in FY 2013. In the same year, the City levied an estimated \$156.1 million in General Fund-related property taxes, or about 28.4 percent of the total billed. Sources: Wayne County Department of Management and Budget, Assessment and Equalization Division, "2013 Apportionment and Equalization Report," page 10 of unnumbered pages; telephone interview with Peter Ewalt of the Division, April 23, 2014; and Disclosure Statement, Doc 4391-2, page 157 of 212.

<sup>94</sup> U.S. Department of Commerce, Bureau of the Census, 2012 American Community Survey 1-Year Estimates, Selected Economic Characteristics, Detroit City, Michigan.

<sup>95</sup> Telephone interview, June 4, 2014.

- (a) As referenced below, the share of property tax collections attributable to residential properties is about fifty percent.<sup>96</sup>
- (b) Assume that the average value of homes of less than median value (\$39,100) is \$30,000, and that the average for homes of greater than median value is \$50,000, and that this same five-to-one ratio applies to apartments.
- (c) The percentage of total equalized value attributable to housing units of less than median value would then equal  $[3/(3 + 5) \times 50\text{ percent}] = 18.8\text{ percent}$ .
- (d) As noted earlier, the City acknowledges that, "Nearly half of all Detroit property owners failed to pay property taxes assessed by the City in 2011" (see footnote (3), above). Given that both extant exemptions and delinquencies are apt to be more common in the case of homes and apartment units of less than median value than in the case of those above, it is reasonable to estimate the loss in incremental revenue associated with this broad exemption as being no greater than fifty percent of 18.8 percent, or 9.4 percent, and likely less.

*Impact on Property Values, All Else Held Constant*

82. The percentage increases in residential General-Fund-related millage rates associated with the incremental rates shown in the first column of Table 2 form the basis for the percentage increase in tax rates for all classes of property under each alternative rate scenario. In other words, all taxpayers' rates increase by the same percentage as homeowners'. Thus, for example, an increase of 7.6 mills (rounded) in the homeowners' rate implies an increase of 38.1 percent ( $7.60/19.95$ ) in rates across-the-board. When the inputs to this calculation are not rounded, the corrected figure is 38.0 percent.

83. In its FY 2012-2013 budget, the City estimated its total State Equalized Valuation in that year to have been \$9,437,451,598.<sup>97</sup> It now estimates its adjusted General Fund-related FY 2013 property tax

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<sup>96</sup> "2011 City of Detroit Property Tax Collection Summary" (POA00178801-8806).

<sup>97</sup> See [http://www.detroitmi.gov/Portals/0/docs/budgetdept/2012-13%20Redbook/Charts/XX\\_State%20Equalized%20Valuations.pdf](http://www.detroitmi.gov/Portals/0/docs/budgetdept/2012-13%20Redbook/Charts/XX_State%20Equalized%20Valuations.pdf)

levy to have been \$156.1 million,<sup>98</sup> corresponding to 1.65 percent of total Equalized Valuation, and thus 0.83 percent of the estimated market value of all taxable property.<sup>99</sup> (See Schedules 6.0-6.2.)

84. Pursuing the example above, a 38.0 percent increase in the current levy ( $0.38 \times \$156.1 = \$59.3$  million) would therefore represent 0.31 ( $0.38 \times 0.83$ ) percent of the estimated market value of taxable property. (See Schedule 6.0.) Corresponding percentages associated with the 10.1- and 12.6-mill tax increases are 0.42 and 0.52, respectively. (See Schedules 6.1 and 6.2.)

85. Assuming a ten-year duration for the added tax and no change either in amount billed or the aggregate market value of taxable property, each of the foregoing percentages (0.31, 0.42, and 0.52) amounts to a prospective reduction in property values ten times greater in Year One (i.e., 3.1 percent, 4.2 percent, and 5.2 percent), declining in linear fashion to zero at the end of Year Ten. (Schedules 6.0-6.2.) These same annual percentage property value offsets are applied in estimating the net yield of our three alternative property tax rate increases, under the assumption that over the next ten years, the estimated market value of taxable property will grow at least as fast (which is to say, not very fast at all) as the tax levy.

86. Such property value offsets, however, might well lead to an understatement of revenue yield, given Mr. Evanko's testimony, based on considerable experience, that, "...there is no direct correlation between an increase in millage rates and property valuations other than perhaps they increase, but there's no evidence that by increasing that millage rate it has the effect of decreasing property values."<sup>100</sup>

87. Mr. Evanko also agrees with the corollary proposition – in direct opposition to the City's position on the issue (see below) – that an increase in the millage rate will in fact produce an increase in increase in revenue.<sup>101</sup>

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<sup>98</sup> Disclosure Statement, Doc 4391-2, page 157 of 212.

<sup>99</sup> As State Equalized Value must by law equate to half of market value – see [http://www.michigan.gov/taxtrib/0,1607,7-187-38252\\_38253-138116--,00.html](http://www.michigan.gov/taxtrib/0,1607,7-187-38252_38253-138116--,00.html)

<sup>100</sup> Deposition of Gary Evanko, June 24, 2014, page 255, lines 1-7.

<sup>101</sup> *Ibid*, page 255, lines 8-13.

### ***Inbound Commuter Tax***

88. Alternative amounts for an inbound commuter tax – \$147, \$244, and \$342 per year (see Schedules 2.0-2.2) – were derived in much the same as the alternative property tax increases discussed above, the difference being that instead of using relative overall tax burdens on the residents of different cities as a second benchmark, other cities' taxes on inbound commuters are considered. (See fourth column in second panel of Table 2.) This tax could either take the form of a straight commuter tax or be imposed indirectly, by requiring parking stickers for non-residents or imposing other fees likely to be disproportionately borne by non-residents.

89. Listed in Table 3, below, are all cities with a population of between 250,000 and 1,600,000 that impose a tax on non-residents – in all but one case (Denver) not in the form of flat tax but rather as an income tax.

**Table 3**  
**Comparative Commuter Tax Burdens as of 2011**

	Population <sup>1</sup>	Burden as a Percent of Income
Philadelphia, PA	1,536,471	3.495%
Columbus, OH	797,434	2.50%
Cleveland, OH	393,806	2.00%
San Francisco, CA	812,826	1.50%
Louisville, KY	602,011	1.45%
<b>Detroit, MI</b>	<b>706,585</b>	<b>1.20%</b>
Kansas City, MO	463,202	1.00%
St. Louis, MO	318,069	1.00%
Newark, NJ	277,540	1.00%
Denver, CO - Flat Tax <sup>2</sup>	619,968	\$117.00
<b>Current Average</b>		<b>1.68%</b>

<sup>1</sup> 2011 US Census; <http://www.census.gov/popest/data/cities/totals/2011/index.html>; SUB-EST2011-01.xls

<sup>2</sup> For individuals earning in excess of \$500 a month. Denver's rate is not included in the average noted above.

<sup>3</sup> See Exhibit 3 for burden amounts apart from Detroit's.

90. As shown, when added to the City's current non-resident income tax of 1.20 percent, an inbound commuter tax amounting to anything up to 0.80 percent of income would keep the City's

overall levy on inbound commuters below those imposed in Philadelphia, Columbus and Cleveland. A tax of \$147 per year would move it up one place on the list; taxes of \$244 and \$342, two.

91. Relative to average entertainment expenditure in 2012 for a family with an income of \$45,000 per year (\$1,934<sup>102</sup>), the alternative tax amounts are quite small. (See Table 2, and page five of Exhibit 9.) Moreover, the significance of the tax at all three levels relative to both entertainment expenditure and income (see page six of Exhibit 9) is overstated, for at least two reasons: (a) the May 2012 average hourly earnings upon which the average annual income estimate is based excludes overtime and bonus payments (as well as fringe benefits); and (b), incomes (and entertainment expenditure) are assumed not to grow at all, either in real or nominal terms, relative to 2012.

92. From the standpoint of equity, it may also be significant that the lower and mid-range amounts of the tax equate – almost exactly and roughly, respectively – with the lower and mid-range amounts of the liability imposed by the hypothesized ten-year property tax increase, for a median-value home. (See second column of upper panel and first column of lower panel of Table 2.)

#### **EFFECTS OF HYPOTHESIZED TAX MEASURES ON THE CITY'S ECONOMIC PROSPECTS**

93. The foregoing are merely examples of ways in which taxes could be increased without material adverse effects. Revenue could similarly be increased simply by collecting the massive amounts of taxes already due but uncollected; increasing rates on other taxes; imposing new taxes of a different kind; and/or increasing fees. Indeed, the City's restructuring scenario assumes that certain fees will be increased. While the City's experts have assumed that current law will remain in effect for the next ten, and even forty, years, laws can and have been changed in the City. The corporate tax rate was recently increased, and the income tax rate has been higher, with revenues commensurately greater.

94. For those and other reasons, the following contention by the City with respect to potential tax measures aimed at improving the City's cash flow is inaccurate:

“Even absent such [statutory] limitations [on City tax rates], however, it would not be practical for the City to raise taxes at this time. ***Increasing Detroit's already-high tax rates would deter individuals and businesses from relocating to, or remaining in, Detroit*** at precisely the time at which the City most needs

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<sup>102</sup> This corresponds, more precisely, to an average income of \$44,759 per year (U.S. Department of Labor, Bureau of Labor Statistics, “Consumer Expenditures in 2012,” Report 1046, March 2014, page 9).

to retain and attract taxpayers and capital investment. Moreover, even if the City raised taxes, ***it is uncertain whether it would be able to collect any additional taxes.*** Nearly half of all Detroit property owners failed to pay property taxes assessed by the City in 2011.” (Disclosure Statement, page 116, emphases added.)

No sound empirical basis exists for either of the above assertions, whether on the record in this proceeding or externally.<sup>103</sup>

95. The many factors commonly considered by real estate appraisers in valuing property offer perspective on the limited role of tax policy in determining property values, within the range of tax rates generally prevailing. An informative discussion of those factors is contained in a reference book for real estate appraisal published by Department of Real Estate of the State of California.<sup>104</sup> Relevant pages from that book are appended as Exhibit 6 (see “Forces Influencing Value” and “Economic Trends Influencing Value”). Indeed, even at a highly aggregated level, divergent local market conditions and trends in demographic and economic drivers produce divergent trends in real estate value (see Exhibit 7.) With respect to the economic impact of tax increases of the kind considered here, more reliable guidance is provided by Mr. Evanko, as cited earlier.

96. It is in part because so many factors influence economic growth (and the related demand for property) that the State of Michigan does not incorporate the macroeconomic effects of tax law changes in forecasting State tax revenue:

“Dynamic estimation [of tax revenues] attempts to quantify the stimulative or negative effects that tax law changes have on macroeconomic variables (e.g., amount of labor supplied, investment and employment levels) and other tax

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<sup>103</sup> See, for example, Richard Dye, Therese McGuire, and David Merriman, “The Impact of Property Taxes and Property Tax Classification on Business Activity in the Chicago Metropolitan Area,” Lincoln Institute of Land Policy Working Paper, 1999 (“...we find no relationship between property tax rates and the growth in the market value of commercial property; no relationship between property tax rates and the growth in the market value of industrial property; and no relationship between property tax rates and the growth in the number of business establishments.” (11)); Alan Peters and Peter Fisher, “The Failures of Economic Development Incentives,” *Journal of the American Planning Association*, Winter 2004 (“...there are very good reasons – theoretical, empirical, and practical – to believe that economic development incentives [including tax reductions] have little or no impact on firm location and investment decisions.” (32)); and Dennis Carlton, “The Location and Employment Choices of New Firms: An Econometric Model with Discrete and Continuous Endogenous Variables,” *The Review of Economics and Statistics*, August 1983 (“...taxes and state incentive programs do not seem to have major effects...” on the location and employment choices of new firms. (440)).

<sup>104</sup> State of California, Department of Real Estate, Reference Book – Information Relating to Real Estate Practice, Licensing and Examinations, 2010.

sources over an extended period of time... Currently, the Treasury and the House and Senate Fiscal Agencies do not incorporate dynamic estimation into revenue estimates. While Treasury recognizes that dynamic effects indeed exist, it does not incorporate dynamic effects because the estimates are very difficult to quantify with any degree of accuracy. This is attributable to a lack of reliable state-level data (e.g., import-export data), problems in modeling interstate factor mobility and the sensitivity of estimates to elasticities used in the models. Other mitigating factors include budget and staff constraints."<sup>105</sup>

97. However, a rough sense of the economic impact of the tax measures outlined here can be gained without reliance on complex models. For example, with respect to a hypothesized ten-year, fifty-two percent increase in the General Fund-dedicated property tax rate, note first of all that as of 2012, the City's estimated population and per-capita income were, respectively, 698,582<sup>106</sup> and \$14,861,<sup>107</sup> indicating an aggregate income for City residents in that year of the product, \$10,381,627,102. FTI's mean forecast General Fund-dedicated property tax revenue in FY 2015 is \$128,098,117, of which roughly half (assume half exactly) – \$64,049,059 – would be derived from residential properties.<sup>108</sup>

98. A fifty-two percent increase in the General Fund-dedicated property tax rate would thus add about half of that – \$32 million – to the amount now levied on non-exempt homeowners and tenants (indirectly), representing only 0.31 percent of City residents' estimated aggregate income in 2012, or less than a third of a cent on the dollar. If we assume that the average taxpayer is in the twenty percent federal income tax bracket, the amount falls to 0.25 percent of income. A transitory loss of that magnitude is hard to reconcile with an allegation of substantial economic cost to the community – especially when viewed in the context of the economic effect of these proceedings overall.

99. Similarly, a hypothesized \$244 per year tax for inbound commuters equates to a one-dollar toll on a road or bridge that need only be paid once a day. It is difficult to see how such a charge could

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<sup>105</sup> Mark Haas and Matthew Knittel, "Revenue Forecasting in Michigan," Proceedings of the 90<sup>th</sup> Annual Conference on Taxation and Minutes of the Annual Meeting of the National Tax Association, November 1997, published Washington, D.C., 1998, page 317. The Michigan State Treasury continues to follow the aforesaid policy (interview with Jay Wortley, Chief Economist and Director, Office of Revenue and Tax Analysis, Treasury, State of Michigan, April 30, 2014).

<sup>106</sup> Bureau of the Census, <http://quickfacts.census.gov/qfd/states/26/2622000.html>

<sup>107</sup> *Ibid.*

<sup>108</sup> As of 2011 (the most recent year for which we have data), the share of property tax collections attributable to residential properties was 49.8% ("2011 City of Detroit Property Tax Collection Summary," POA00178801-8806.)

induce a significant number commuters presently working in the City, or in the future expected to be, to seek employment elsewhere.

100. It should also be borne in mind that any reduction in local income resulting from the added tax revenues here considered would be far less than the proposed \$7.4 billion<sup>109</sup> in value to be transferred from the City's creditors to the City, and/or future creditors, through the relinquishment of current claims.

#### **ADDED REVENUE FROM CORRECTED PROPERTY TAX REVENUE FORECAST AND HYPOTHESIZED TAX MEASURES, FY 2014 - FY 2023**

101. A range for total incremental General Fund revenue deriving from (a) corrections to the City's property tax revenue and Revenue Sharing forecasts and (b) alternative property and commuter tax measures is presented in Table 5 on the following page. Forecast revenue from the inbound commuter tax is likely understated because, contrary to the current trend, citywide employment is assumed not to grow at all, relative to 2011 (whereas it actually has been growing – see Chart 4).

#### **ADDED REVENUE FROM IMMEDIATE REINVESTMENT STIMULUS**

102. As noted earlier, the City acknowledges that its reinvestment program can be expected to enlarge the City's tax base and associated tax revenue, and its estimation of that effect on a year-to-year basis with respect to property and income tax revenue is reflected in the financial projections in POA00706524 and 525.

103. According to those schedules, reinvestment is assumed to add \$110.1 million to forecast "steady state" *property tax* revenue of \$963.8 million over the ten-year forecast period, an increase of 11.4 percent. Of that \$110.1 million forecast reinvestment-related increment, only \$14.8 million is forecast as occurring over the first five years (FY 2014- FY 2018) of the forecast period, notwithstanding a forecast \$592.7 million in combined blight remediation and Reorganization/Investment expenditure (more than half of all planned reinvestment) in those first five years.

104. With respect to *income tax* revenue, reinvestment is assumed to add \$204.0 million to forecast "steady state" revenue of \$2,566.3 million over the ten-year forecast period, an increase of 7.9

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<sup>109</sup> Expert Report of Kenneth Buckfire, Attachment 1.

percent. Of that \$204.0 million forecast reinvestment-related increment, only \$50.7 million is forecast as occurring over the first five years of the forecast period.

**Table 5**

<b>ESTIMATED INCREMENTAL GENERAL FUND REVENUE THROUGH FY 2023, EXCLUDING POTENTIAL ADDED INCOME TAX REVENUE</b>			
<b>(Millions)</b>			
<b>FORECASTING CORRECTION, PROPERTY TAX</b>	\$401.4 <sup>(*)</sup>	\$393.7 <sup>(**)</sup>	\$385.9 <sup>(***)</sup>
<b>TEN-YEAR GENERAL FUND PROPERTY TAX INCREASE, FY 2014 – FY 2023</b>	@38.9%	@51.8%	@64.8%
@ 75% Collection Rate (CR)	\$389.4	\$516.3	\$641.7
@ 85% Collection Rate (CR)	\$441.3	\$585.1	\$727.2
<b>INBOUND COMMUTER TAX, FY 2015 – FY 2023</b>	@\$147/yr.	@\$244/yr.	@\$342/yr.
	\$207.9	\$346.4	\$485.0
<b>TOTAL INCREMENTAL REVENUE RANGE</b>	<b>\$ 998.7</b> @ 75% CR	<b>\$1,256.4</b> @ 75% CR	<b>\$ 1,598.2</b> @ 85% CR
(*) Reflects estimated reduction in property values due to 38.9% increase in the property tax rate.			
(**) Reflects estimated reduction in property values due to 51.8% increase in the property tax rate.			
(***) Reflects estimated reduction in property values due to 64.8% increase in the property tax rate.			

105. Both the overall levels and timing of the aforesaid reinvestment-related tax revenue forecasts indicate that, while the City may, by its own lights, have allowed for increases in the tax base due to expected improvement in business and living conditions, it has not adequately allowed for the stimulative effect on the local economy of the *reinvestment effort itself*. Nor, for that matter, do the amounts shown in Table 5, to that extent biasing them downward.

106. Such stimulative effects are commonly estimated through the application of economic models such as that developed by IMPLAN, and briefly described by two academic authors as follows:

“IMPLAN... is a computer software package that consists of procedures for estimating local input-output models and associated databases. The acronym is

for *Impact Analyses and Planning*. IMPLAN was originally developed by the U.S. Forest Service in cooperation with the Federal Emergency Management Agency and the U.S. Department of the Interior's Bureau of Land Management to assist in land and resource management planning. Since 1993, the IMPLAN system has been developed under exclusive rights by the Minnesota Implan Group, Inc. (Stillwater, Minnesota) which licenses and distributes the software to users. Currently there are hundreds of licensed users in the United States including universities, government agencies, and private companies.”<sup>110</sup>

A partial listing of government and other IMPLAN model users is appended as Exhibit 8.

107. Application of the IMPLAN model to derive the economic and fiscal impacts of the proposed \$1.4 billion in City reinvestment cited earlier produces the estimates in Table 6 on the following page. While these gains would not be fully realized until the end of the forecast period, were we to assume, for simplicity, that the \$1.4 billion will be disbursed in equal \$140.0 million annual amounts over that period, this would yield roughly \$175 million (\$34.9 million x .50 x 10) in additional business property and personal income tax revenue, relative to the City’s forecasts. Similarly estimated, the addition to total State and City tax revenues and fees would be about \$270 million (\$54.3 million x .50 x 10).

*Concluding Note: I understand that discovery is ongoing. I reserve the right to change, amend, modify or supplement my report and the opinions expressed herein due to any new facts or information that may become known to me prior to or during the trial.*

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Glenn D. Meyers".

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Dr. Glenn D. Meyers

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<sup>110</sup> David Mulkey and Alan W. Hodges, “Using IMPLAN to Assess Local Economic Impact,” <http://eb5info.com/articles/33-using-implan-to-assess-local-economic-impacts>.

**Table 6**

<b>APPLICATION OF IMPLAN ECONOMIC IMPACT MODEL TO THE CITY'S PROPOSED \$1.4 BILLION IN REINVESTMENT</b>		
<i>Citywide Impacts Only (*), Figures Are Annual, All but Jobs in Millions</i>		
(1)	Additional Jobs Created (both full- and part-time)	11,280
(2)	Additional Worker Income	\$759
(3)	Additional Output (GDP analog)	\$1,886
(4)	Additional Business Property Taxes	\$16.1
(5)	Additional Personal Income Taxes	\$12.9
	<i>Sum of (4) and (5)</i>	\$29.0
(6)	Business Sales and Use Taxes	\$16.6
(7)	All State and Local Taxes and Fees	\$54.3
(*) For the thirty City Zip Codes specified at <a href="http://www.detroitmi.gov/Portals/0/docs/its/maps/gis_new/map_zipcode.pdf">http://www.detroitmi.gov/Portals/0/docs/its/maps/gis_new/map_zipcode.pdf</a> . Reinvestment classified as "State and Local Government Investment." Based on IMPLAN-sourced data for 2012.		

## EXHIBIT 1

# DETROIT MARKET OUTLOOK

**Stuart Hoffman**  
Chief Economist

**Gus Faucher**  
Senior Economist

**William Adams**  
Senior Economist

**Kurt Rankin**  
Economist

**Mekael Teshome**  
Economist

THE PNC FINANCIAL SERVICES GROUP | Three PNC Plaza | 225 Fifth Avenue | Pittsburgh, PA 15222-2724

## JOB SITUATION

The Detroit market area has a battle ahead of it in trying to maintain its economic recovery momentum through the coming year. Manufacturing hiring has slowed, and service sector gains have all but stalled (Chart 1). Tax rate increases and government austerity have tamped down national economic growth, and thus have stolen demand from auto industry production. Detroit bears the brunt of this outcome not only through slower auto industry hiring, but through weaker local consumption trends as the pace of disposable income growth in the market area stalls. Add to these private sector woes the fact that the City of Detroit's recently filed bankruptcy petition will severely dampen government hiring in the market area, and Detroit's labor market prospects for the year ahead are significantly dimmer than they had been in 2012.

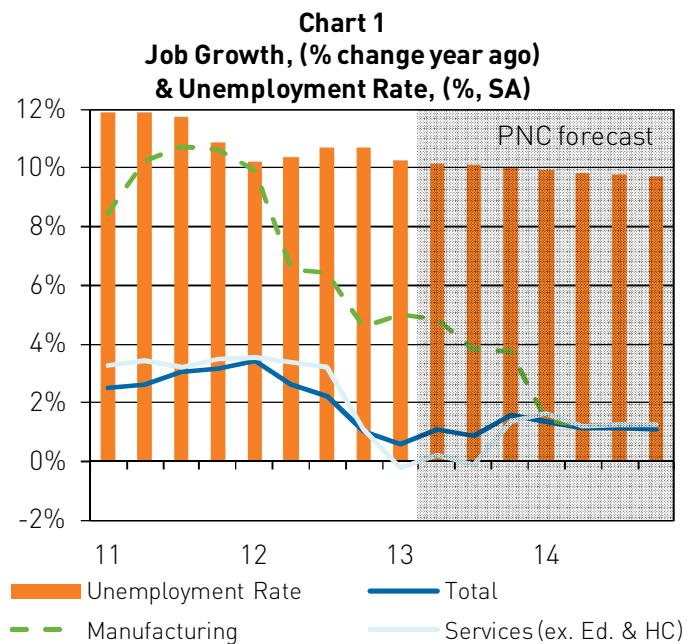


Chart sources: Bureau of Labor Statistics; The PNC Financial Services Group

## INCOME

Income growth in Detroit has slowed from its early-recovery pace, but will not remain weakened for long. Manufacturing employment continues to lead job gain in the market area—even if they have slowed somewhat themselves—and with such positions come relatively high wages. Re-accelerating U.S. national economic activity in the second half of 2013 will push the market area's manufacturers back toward hiring mode, leading to greater consumer spending activity in the local economy. Service sector and retail job growth will pick up in response to this trend, and Detroit should see its income base again advancing on all private industry fronts (Chart 2) once again. Detroit's climb back to outpacing the national median household income standard remains a longer-term struggle, but the market area will continue to make strides toward that end through 2014.

**Chart 2**  
**Income Growth (% change year ago)**  
**& Median Household Income (Ths. \$, SA)**

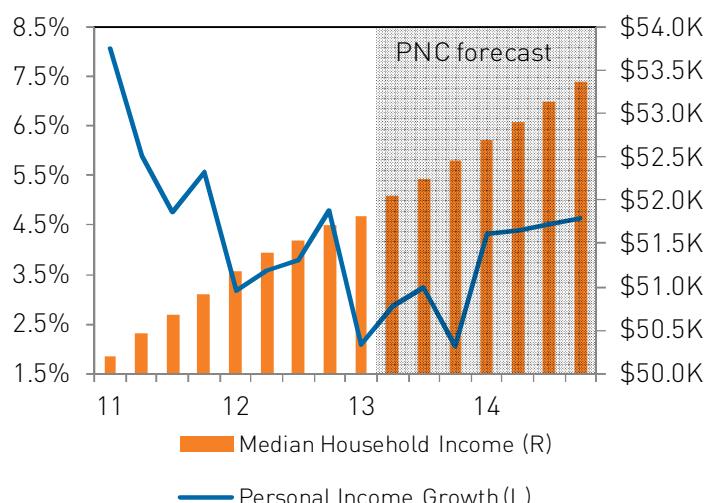


Chart sources: Bureau of Census; Moody's Analytics; The PNC Financial Services Group

## HOUSING

Detroit's housing market will continue making an impressive push towards health in the coming year. Home price growth in the market area (Chart 3) has been exceeding even the surprisingly strong national trend over the past year, and growth in residential permitting activity outpaced both the national and Midwest regional averages through the first half of 2013. It bears noting that both of these metrics are working from exceptional lows endured by Detroit during the recession. However, the gains are nonetheless encouraging. Strengthening housing markets will provide a base of confidence to households in the market area and will help keep consumption trends from sliding further as the job market tries to avoid stumbling. As damaging as the market collapse was to existing home equity, renewed living cost competitiveness will contribute to the market area's prospects as an industrial development locale going forward.

**Chart 3**  
Home Sales (Ths., SAAR)  
& Price Growth, (% change year ago)

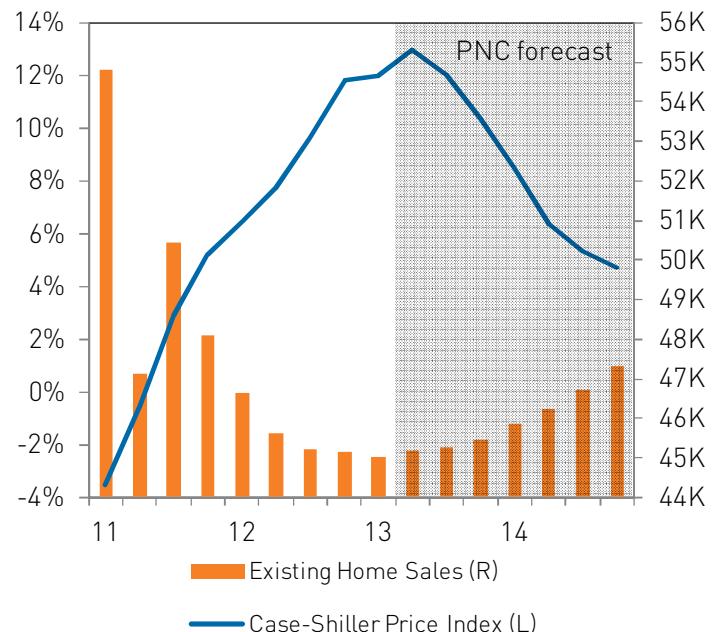


Chart sources: National Association of Realtors; Fiserv, Inc.; The PNC Financial Services Group

## DEMOGRAPHICS

Demographic trends are not one of Detroit's strong suits. As passenger vehicle manufacturing has branched out across the Southern U.S. through the past several decades, Detroit has struggled to retain its workforce. The pace of out-migration was exacerbated as the recession shattered confidence in near-term employment prospects (Chart 4). Domestic auto manufacturers will be more competitive in the years to come as they shift their cultures to accommodate new technologies, but this longstanding economic core must still be supplemented with greater industrial diversity if migration trends are to be reversed.

Detroit suffers from a degree of social stigma due to crime rates and government mismanagement. The potential decline of government-provided services resulting from the City of Detroit's bankruptcy could weaken demographics further. Improving attractiveness to potential residents will be a long-term fight for the market area.

**Chart 4**  
Demographic Growth, (% change year ago)  
& Net Migration, (Ths., SA)

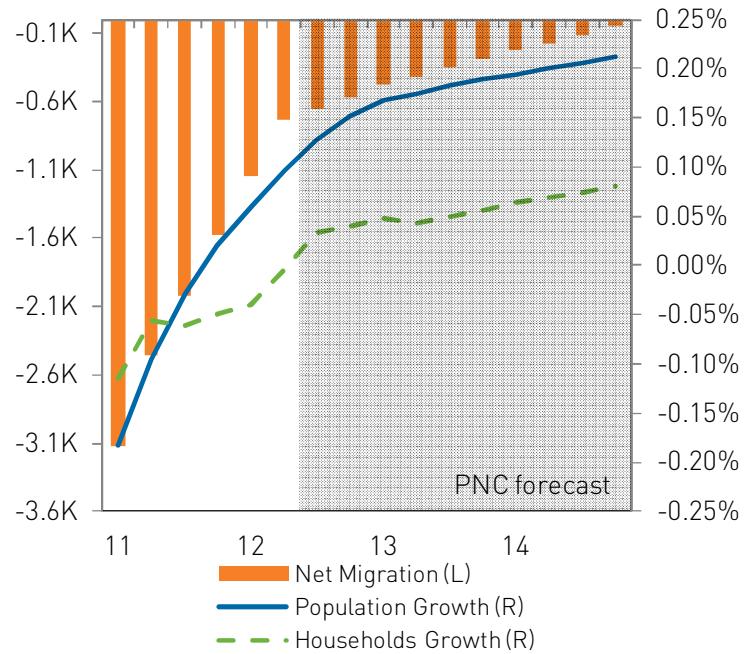


Chart sources: Bureau of Census; Bureau of Economic Analysis  
Moody's Analytics; The PNC Financial Services Group

## OUTLOOK SUMMARY

Detroit's economic prospects remain tied to the fitful pace of the national economic recovery. The market area's preeminent driver remains manufacturing operations. The pace of income growth that these industries supply determines local consumption potential, and therefore job growth prospects in service and retail industries. The second half of 2013 should see the U.S. economy re-accelerate, and in doing so supply Detroit's manufacturing base with renewed demand and cause for another round of growth. But the national recovery is not set to make a charge forward any more strongly than growth seen in the past few years. As a result, Detroit's own economic recovery will be steady, but unspectacular in the near term.

One inescapable damper on Detroit's growth potential is the City of Detroit's fiscal issues. The City filed a bankruptcy petition in July and even though challenges to the filing will persist in the coming months, government employment is likely to shrink nonetheless as austerity measures are put in place to stem an approximate \$4 million monthly shortfall in revenue. This reality will place even greater demands upon private sector job growth to keep consumers from holding back in their spending habits. Confidence in Detroit's economic future is—and will remain—a volatile issue, as capable of reinforcing growth as it is of undercutting progress.

Detroit's economic future will always include auto design and manufacturing as a primary driver. However, the market area must work to grow a broader array of industries. Within the southeastern Michigan region, Ann Arbor provides an example of how the commercialization of university research can help garner the sorts of economic gains that an attractive cost structure can provide. The next several years will feature businesses looking for expansion opportunities, and new startups searching for cost efficient locales. Detroit's capacity to take advantage of its newfound cost strengths offers the means to start defining its longer-term development path.

## FORECAST TABLE

	U.S.			Detroit		
	2012	2013F	2014F	2012	2013F	2014F
<b>Employment Growth, (% change)</b>	1.7	1.6	1.5	2.3	1.0	1.2
<b>Unemployment Rate, (%)</b>	8.1	7.5	6.8	10.5	10.1	9.8
<b>Personal Income Growth, (% change)</b>	3.7	2.7	4.0	3.8	2.6	4.5
<b>Median Household Income, (Ths. \$)</b>	52.5	53.8	55.1	51.5	52.1	53.0
<b>House Prices**, (% change)</b>	2.8	9.5	3.6	9.0	11.8	6.2
<b>Single-Family Permits* (% change)</b>	23.5	20.4	5.7	43.5	23.1	45.4
<b>Multifamily Permits* (% change)</b>	38.7	36.8	12.3	-17.1	146.4	17.6

\*U.S. starts, F = PNC forecast, \*\*Case-Shiller House Price Index

	U.S.		Detroit	
	2004-2009†	2009-2014†	2004-2009†	2009-2014†
<b>Employment Growth, (% change)</b>	-0.1	1.1	-3.2	1.4
<b>Unemployment Rate, (%)</b>	5.8	8.4	8.8	11.8
<b>Personal Income Growth, (% change)</b>	3.6	3.9	-0.3	3.9
<b>Median Household Income, (Ths. \$)</b>	48.7	52.2	51.6	51.0
<b>House Prices**, (% change)</b>	-2.9	2.2	-10.1	4.8
<b>Single-Family Permits* (% change)</b>	-22.7	9.1	-40.8	42.3
<b>Multifamily Permits* (% change)</b>	-20.2	27.7	-56.1	75.9

\*U.S. starts, †per annum, \*\*Case-Shiller House Price Index

## LONG-RUN EMPLOYMENT TRENDS

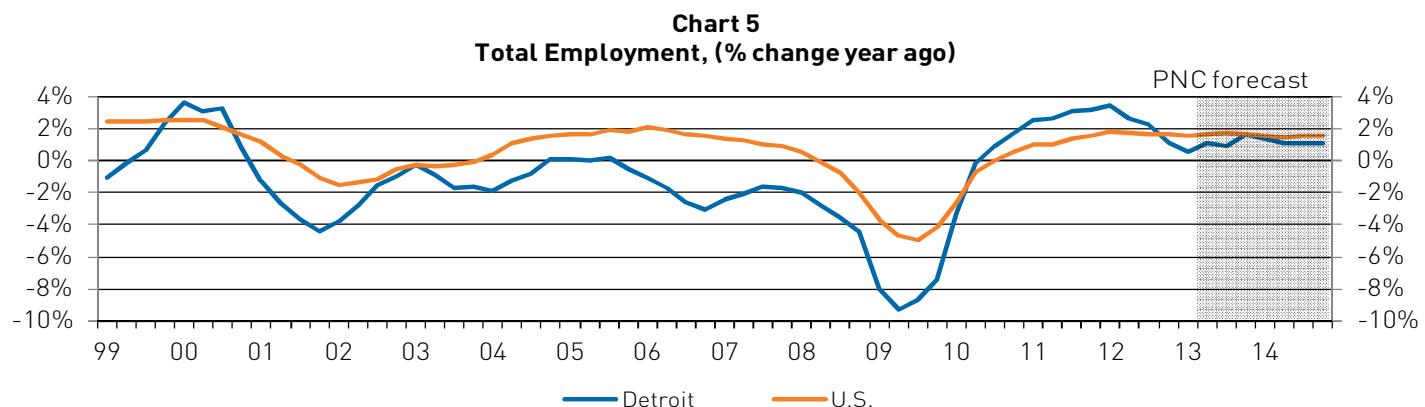


Chart sources: Bureau of Labor Statistics; The PNC Financial Services Group

## LONG-RUN DEMOGRAPHIC TRENDS

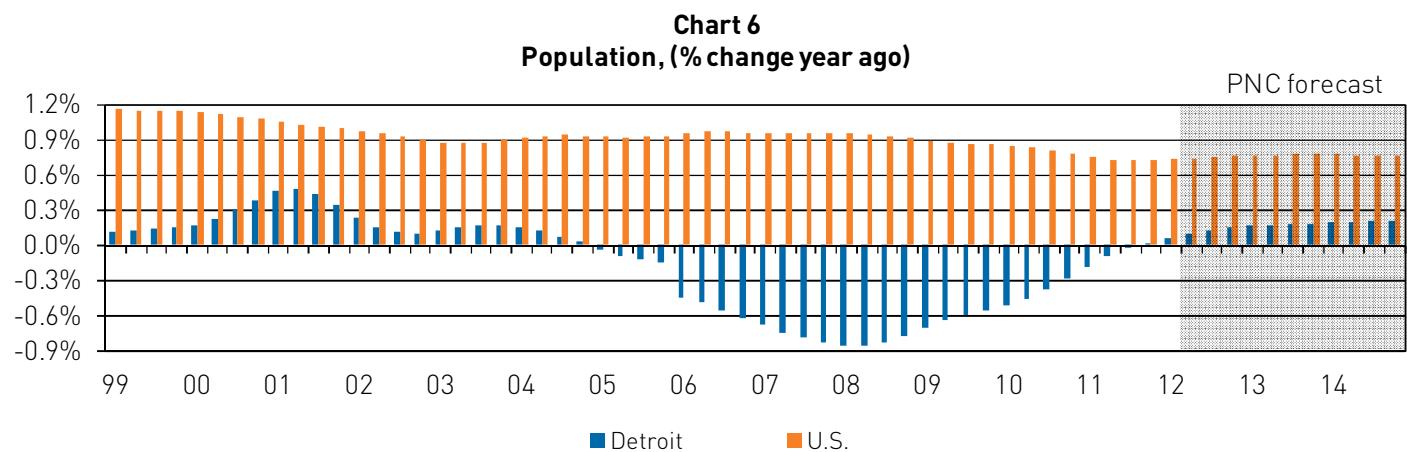


Chart sources: Bureau of Census; Moody's Analytics; The PNC Financial Services Group

## LONG-RUN HOUSE-PRICE TRENDS

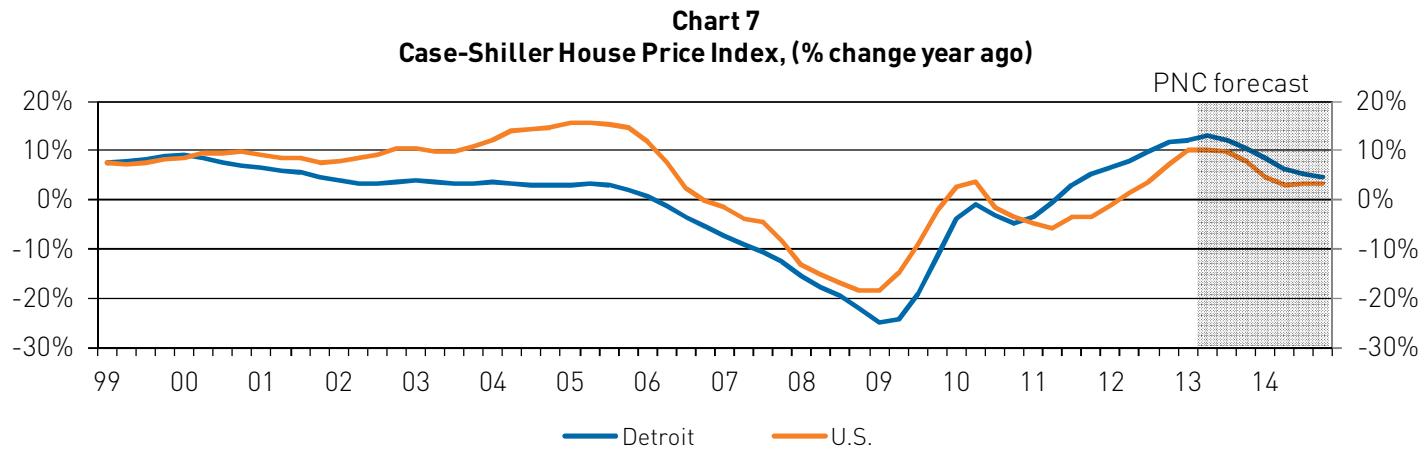


Chart source: National Association of Realtors; Fiserv, Inc.; The PNC Financial Services Group

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## EXHIBIT 2

Government of the  
District of Columbia



Vincent C. Gray  
Mayor

Natwar M. Gandhi  
Chief Financial Officer

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**Tax Rates and Tax Burdens**  
in the District of Columbia -  
A Nationwide Comparison

**2012**

**Issued December 2013**

**TABLE 1**

**ESTIMATED BURDEN OF MAJOR TAXES FOR A HYPOTHETICAL FAMILY OF THREE, 2012  
\$50,000**

RANK	CITY	ST	TAXES				BURDEN	
			INCOME	PROPERTY	SALES 2/	AUTO	AMOUNT	PERCENT
1	Bridgeport	CT	904	7,003	1,179	554	9,641	19.3%
2	Philadelphia	PA	1,550	5,903	1,045	282	8,781	17.6%
3	Milwaukee	WI	1,607	5,272	1,009	339	8,226	16.5%
4	Baltimore	MD	1,209	4,591	718	519	7,037	14.1%
5	Columbus	OH	1,199	4,562	880	255	6,897	13.8%
6	Detroit	MI	1,713	3,440	1,126	197	6,476	13.0%
7	Providence	RI	880	3,624	944	895	6,343	12.7%
8	Louisville	KY	1,333	3,664	928	285	6,211	12.4%
9	Chicago	IL	2,079	2,278	1,269	342	5,968	11.9%
10	Wilmington	DE	665	4,900	0	202	5,768	11.5%
11	Portland	ME	580	3,999	715	460	5,754	11.5%
12	Los Angeles	CA	0	4,167	911	520	5,597	11.2%
13	Des Moines	IA	1,048	3,178	923	342	5,491	11.0%
14	Indianapolis	IN	2,189	1,896	1,178	154	5,417	10.8%
15	Jackson	MS	735	2,565	1,332	749	5,381	10.8%
16	Newark	NJ	630	2,718	1,810	129	5,287	10.6%
17	New Orleans	LA	845	2,941	1,315	178	5,279	10.6%
18	Charlotte	NC	1,466	1,932	1,386	494	5,278	10.6%
19	New York City	NY	1,471	2,254	1,207	232	5,164	10.3%
20	Albuquerque	NM	381	2,900	1,632	196	5,109	10.2%
21	Boston	MA	1,810	2,298	688	303	5,098	10.2%
22	Omaha	NE	709	2,789	1,270	320	5,088	10.2%
23	Kansas City	MO	676	2,215	1,437	521	4,848	9.7%
24	Atlanta	GA	1,015	2,128	1,421	260	4,825	9.6%
25	Phoenix	AZ	406	1,839	2,170	294	4,708	9.4%
26	Little Rock	AR	999	1,637	1,715	355	4,706	9.4%
27	Memphis	TN	0	2,675	1,708	182	4,565	9.1%
28	Oklahoma City	OK	1,100	1,693	1,526	225	4,545	9.1%
29	Minneapolis	MN	1,008	1,962	1,225	337	4,532	9.1%
30	Portland	OR	1,280	2,919	0	320	4,520	9.0%
31	Wichita	KS	927	1,507	1,608	459	4,502	9.0%
32	Manchester	NH	0	3,851	275	282	4,408	8.8%
33	Houston	TX	0	2,385	1,710	218	4,313	8.6%
34	Virginia Beach	VA	1,247	1,973	700	369	4,289	8.6%
35	Charleston	WV	1,817	896	1,106	469	4,288	8.6%
36	Fargo	ND	284	2,637	1,037	274	4,233	8.5%
37	Salt Lake City	UT	1,106	1,478	1,120	328	4,032	8.1%
38	Boise	ID	723	1,433	1,418	293	3,867	7.7%
39	Burlington	VT	595	2,215	827	217	3,854	7.7%
40	Denver	CO	873	1,406	1,221	332	3,832	7.7%
41	Birmingham	AL	1,033	899	1,504	285	3,721	7.4%
42	Seattle	WA	0	2,169	1,140	360	3,669	7.3%
43	<b>WASHINGTON</b>	<b>DC</b>	<b>1,179</b>	<b>1,197</b>	<b>945</b>	<b>257</b>	<b>3,579</b>	<b>7.2%</b>
44	Sioux Falls	SD	0	2,158	1,164	241	3,562	7.1%
45	Columbia	SC	998	1,039	792	477	3,306	6.6%
46	Honolulu	HI	679	1,101	1,183	335	3,298	6.6%
47	Jacksonville	FL	0	1,857	1,086	298	3,241	6.5%
48	Anchorage	AK	0	2,879	119	163	3,161	6.3%
49	Las Vegas	NV	0	1,681	906	451	3,038	6.1%
50	Cheyenne	WY	0	1,131	921	251	2,303	4.6%
51	Billings	MT	683	1,018	35	475	2,211	4.4%
<b>AVERAGE</b>			<b>1/</b>	<b>1,064</b>	<b>2,605</b>	<b>1,132</b>	<b>339</b>	<b>4,887</b>
<b>MEDIAN</b>				<b>1,008</b>	<b>2,254</b>	<b>1,140</b>	<b>303</b>	<b>4,706</b>
<b>9.4%</b>								

1/ Based on jurisdictions actually levying tax.

2/ AK, NH, and MT do not have a general sales tax but various selective sales taxes were applicable to consumption items used to estimate these sales tax burdens.

**TABLE 1**  
**ESTIMATED BURDEN OF MAJOR TAXES FOR A HYPOTHETICAL FAMILY OF THREE, 2012**  
**\$25,000**

RANK	CITY	ST	TAXES				BURDEN	
			INCOME 2/	PROPERTY 3/	SALES 4/	AUTO	AMOUNT	PERCENT
1	Honolulu	HI	89	2,820	1,052	272	4,232	16.9%
2	Chicago	IL	745	2,021	1,065	297	4,128	16.5%
3	Atlanta	GA	565	2,098	1,228	197	4,087	16.3%
4	Bridgeport	CT	8	2,667	905	422	4,001	16.0%
5	Phoenix	AZ	135	1,918	1,701	224	3,978	15.9%
6	Newark	NJ	0	2,290	1,474	110	3,873	15.5%
7	Philadelphia	PA	788	1,974	809	223	3,794	15.2%
8	Charlotte	NC	425	1,846	1,133	385	3,789	15.2%
9	Little Rock	AR	302	1,743	1,438	270	3,753	15.0%
10	Birmingham	AL	409	1,780	1,279	218	3,686	14.7%
11	Indianapolis	IN	865	1,708	975	120	3,669	14.7%
12	Boston	MA	299	2,544	554	241	3,638	14.6%
13	Jackson	MS	60	1,831	1,146	556	3,593	14.4%
14	New Orleans	LA	203	2,107	1,101	140	3,552	14.2%
15	New York City	NY	0	2,334	970	180	3,484	13.9%
16	Los Angeles	CA	0	2,327	759	396	3,481	13.9%
17	Virginia Beach	VA	144	2,428	584	291	3,447	13.8%
18	Detroit	MI	446	1,881	934	161	3,421	13.7%
19	Charleston	WV	666	1,513	883	358	3,420	13.7%
20	Kansas City	MO	192	1,713	1,113	392	3,410	13.6%
21	Providence	RI	(102)	2,066	766	652	3,381	13.5%
22	Houston	TX	0	1,807	1,382	180	3,368	13.5%
23	Memphis	TN	0	1,807	1,375	144	3,326	13.3%
24	Las Vegas	NV	0	2,221	694	345	3,260	13.0%
25	Seattle	WA	0	2,048	910	289	3,247	13.0%
26	Milwaukee	WI	301	1,804	860	280	3,245	13.0%
27	Jacksonville	FL	0	2,006	973	230	3,209	12.8%
28	Salt Lake City	UT	29	1,895	923	282	3,129	12.5%
29	Louisville	KY	532	1,612	756	218	3,118	12.5%
30	Minneapolis	MN	0	1,826	974	283	3,083	12.3%
31	Denver	CO	0	1,829	982	259	3,070	12.3%
32	Boise	ID	(171)	1,826	1,087	246	2,989	12.0%
33	Wichita	KS	(197)	1,496	1,311	351	2,961	11.8%
34	Oklahoma City	OK	(80)	1,585	1,258	193	2,956	11.8%
35	Columbus	OH	289	1,767	694	203	2,953	11.8%
36	Baltimore	MD	0	2,004	545	401	2,950	11.8%
37	Omaha	NE	0	1,661	1,037	242	2,941	11.8%
38	Albuquerque	NM	(272)	1,681	1,372	159	2,940	11.8%
39	Columbia	SC	0	1,802	680	358	2,839	11.4%
40	Portland	ME	0	1,900	568	320	2,788	11.2%
41	Des Moines	IA	78	1,693	733	269	2,773	11.1%
42	Sioux Falls	SD	0	1,565	1,007	199	2,772	11.1%
43	<b>WASHINGTON</b>	<b>DC</b>	<b>(319)</b>	<b>2,095</b>	<b>721</b>	<b>213</b>	<b>2,710</b>	<b>10.8%</b>
44	Manchester	NH	0	2,204	275	224	2,703	10.8%
45	Portland	OR	265	2,051	0	258	2,574	10.3%
46	Fargo	ND	28	1,432	845	231	2,536	10.1%
47	Cheyenne	WY	0	1,528	755	193	2,476	9.9%
48	Anchorage	AK	0	2,144	73	148	2,366	9.5%
49	Billings	MT	115	1,792	26	414	2,347	9.4%
50	Wilmington	DE	0	2,137	0	159	2,296	9.2%
51	Burlington	VT	(2,606)	2,226	655	179	454	1.8%
<b>AVERAGE</b> 1/			<b>132</b>	<b>1,942</b>	<b>925</b>	<b>266</b>	<b>3,180</b>	<b>12.7%</b>
<b>MEDIAN</b>			<b>168</b>	<b>1,881</b>	<b>934</b>	<b>242</b>	<b>3,245</b>	<b>13.0%</b>

1/ Based on jurisdictions actually levying tax.

2/ Amounts in parentheses represent refundable State Earned Income Tax Credits; for Idaho it represents the Refundable Grocery Credit.

3/ Based on 20 percent of estimated annual rent.

4/ AK, NH, and MT do not have a general sales tax but various selective sales taxes were applicable to consumption items used to estimate these sales tax burdens.

## EXHIBIT 3

## **Sources of Data in Evaluating a Potential Commuter Surcharge for the City of Detroit**

### **General**

2011 US Census Bureau Population Data -

<http://www.census.gov/popest/data/cities/totals/2011/index.html>; SUB-EST2011-01.xls.

BLS News Release - Based upon averages from the Bureau of Labor and Statistics, U.S. Department of Labor, May 17, 2013 News Release 13-757-CHI, "Occupational Employment and Wages in Detroit-Livonia-Dearborn, Mich. Metropolitan Division - May 2012."

Number of Non-residential Detroit commuters - Comparing Detroit's Commuting Patterns with Other Cities', Federal Reserve Bank of Chicago, December 4, 2013, Martin Lavelle and Emmanuel Ogbonna.

### **Cities Used on the Model:**

Columbus Tax Facts -

[http://incometax.columbus.gov/content\\_two\\_column.aspx?id=292&menu\\_id=466](http://incometax.columbus.gov/content_two_column.aspx?id=292&menu_id=466).

Cleveland Tax Rates - Per discussion with Nassim Lynch, Tax Administrator, Division of Taxation.

<http://www.ccatax.ci.cleveland.oh.us/?p=taxrates>. Non-residents may receive a credit off the 2% from their local resident community based upon the local resident tax rate.

Detroit income tax rates -

<http://www.detroitmi.gov/Departments/Finance/IncomeTax/CityofDetroitIncomeTaxRates/tabcid/1655/Default.aspx>.

Denver: Flat monthly tax of \$5.75 for city earners over \$500 -

<http://www.denvergov.org/Portals/571/documents/TaxGuide/Occupational%20Privilege%20Tax.htm>.

Kansas City - Confirmed through the City of Kansas City, MO, Finance Department -

<http://kcmo.gov/finance/tax-info/>.

Louisville occupational fees/taxes (FAQ) - <http://www.louisvilleky.gov/Revenue/HelpResources/faq.htm>.

Newark – Per discussions with City Tax Collector's Office - <http://www.payroll-taxes.com/state-tax/new-jersey>.

Philadelphia City Wage Tax - <http://www.phila.gov/Revenue/businesses/taxes/Pages/WageTax.aspx>.

San Francisco Payroll Expense Tax Ordinance - Sec. 903.1. Rate of Payroll Expense Tax.;

<http://sftreasurer.org/payroll-expense-tax>.

St. Louis city revenues - <https://stlouis-mo.gov/government/departments/comptroller/investor-relations/city-information/City-Revenues.cfm>.

## **Cities Rejected from Model**

Baltimore: Maryland local taxes based on where you live, not where you work -  
[http://taxes.marylandtaxes.com/Individual\\_Taxes/Individual\\_Tax\\_Types/Income\\_Tax/Tax\\_Information/Tax\\_Rates/Local\\_and\\_County\\_Tax\\_Rates.shtml](http://taxes.marylandtaxes.com/Individual_Taxes/Individual_Tax_Types/Income_Tax/Tax_Information/Tax_Rates/Local_and_County_Tax_Rates.shtml).

City of Albuquerque does not assess a wage revenue income tax – Per discussion with City Payroll Department.

City of Birmingham tax rates are 1% for resident and non-residents. - City of Birmingham, Tax and License Administration Division; <http://www.informationbirmingham.com/tax-office.aspx>.

City of Boston does not assess a wage revenue income tax - <http://www.mass.gov/dor/all-taxes/tax-rate-table.html>.

City of Charlotte does not assess a wage revenue income tax – Per discussion with Tax Collector's Office.

City of Easton, PA collects earned income tax of 1.25% on residents and nonresidents - Excluded from study due to low population size. <http://www.easton-pa.gov/otaxes.html>.

City of Fresno does not assess a wage revenue income tax – Per discussion with City Finance Department.

City of Indianapolis does not assess a wage revenue income tax - Per call with City of Indianapolis, Office of Finance and Management.

City of Las Vegas does not assess a wage revenue income tax - Per call to the City of Las Vegas Department of Finance.

City of Los Angeles does not assess a wage revenue income tax - Per conversation with the City of Los Angeles Tax Advocate's office.

City of Memphis does not assess a wage revenue income tax – Per discussion with City Treasury.

City of Milwaukee does not assess a wage revenue income tax – Per discussion with City Controller's Office.

City of Minneapolis does not assess a wage revenue income tax – Per discussion with City Assessor's Office.

City of Nashville does not assess a wage revenue income tax -  
<http://www.nashvilleareainfo.com/homepage/relocation-expansion/taxes-incentives>.

City of Oklahoma City does not assess a wage revenue income tax – Per discussion with City Finance Department.

City of Pittsburgh residents pay 3%, State of Penn, non-residents who receive income from employer within Pittsburgh have no tax and are taxed by their own town/boro of residence. Out of state residents who earn wages in Pittsburgh are taxed at 1%. - Per call with the City of Pittsburgh, Department of Finance and with Jordan Tax Services (vendor for tax administration for the City).

City of Portland does not assess a wage revenue income tax – Per discussion with Portland Revenue Bureau.

City of San Jose does not assess a wage revenue income tax - Confirmed through a call to the City of San Jose, Department of Finance; <https://www.sanjoseca.gov/index.aspx?nid=196>.

City of Tucson does not assess a wage revenue income tax – Per discussion with City Finance Department.

City of Wichita does not assess a wage revenue income tax – Per discussion with City Finance Department.

“Commuter Tax has Driven Jobs out of the City,” Larry Eichel, Philadelphia Inquirer, April 24, 2006.

“Easton City Council Approves Commuter Tax,” The Express-Times, Zach Lindsey, August 8.2012, lehighvalley.com.

New York City proposed non-residential wage tax rate - “NYC Council Seeks Commuter Tax Revival,” Newsday, March 4, 2014.

State of Florida does not assess a wage revenue income tax - City County Collector;  
<http://www.usatoday.com/story/money/personalfinance/2014/04/26/these-states-have-no-income-tax/8116161/>.

State of Texas does not assess a wage revenue income tax -  
<http://www.usatoday.com/story/money/personalfinance/2014/04/26/these-states-have-no-income-tax/8116161/>.

State of Washington does not assess a wage revenue income tax -  
<http://dor.wa.gov/content/findtaxesandrates/incometax/>.

Washington, DC taxes - Conversation with the Director of Taxation; <http://cfo.dc.gov/node/232942>.

Wilmington Earned Income Tax - <http://www.ci.wilmington.de.us/government/earnedincometax>.

## **Additional References**

Earnings Tax, Finance and Audit Committee, Work Session, August 30, 2007 –  
<http://www.kcmo.org/idc/groups/citymanager/documents/citymanagersoffice/earningstax.pdf>

The Commuter Tax and the Fiscal Cost of Commuters in New York City, Howard Chernick and Olesya Tkacheva Dec. 2001 - Published as "Should New York City Tax Commuters?", State Tax Notes, Vo.25, No.6, August, 2002, pp.451 – 456.

Commuter Tax on Suburbanites Working In Indianapolis? -

<http://www.newgeography.com/content/004163-commuter-tax-suburbanites-working-indianapolis>.

Louisville Successfully Transitions from Industrial to Service Economy - The Regional Economist, July 2013, by Charles S. Gascon and Sean P. Grover, <http://www.scribd.com/doc/176613737/Regional-Economist-July-2013>.

Salt Lake City Daytime Population: Should Commuter Support City Services; Commuter Tax Option -

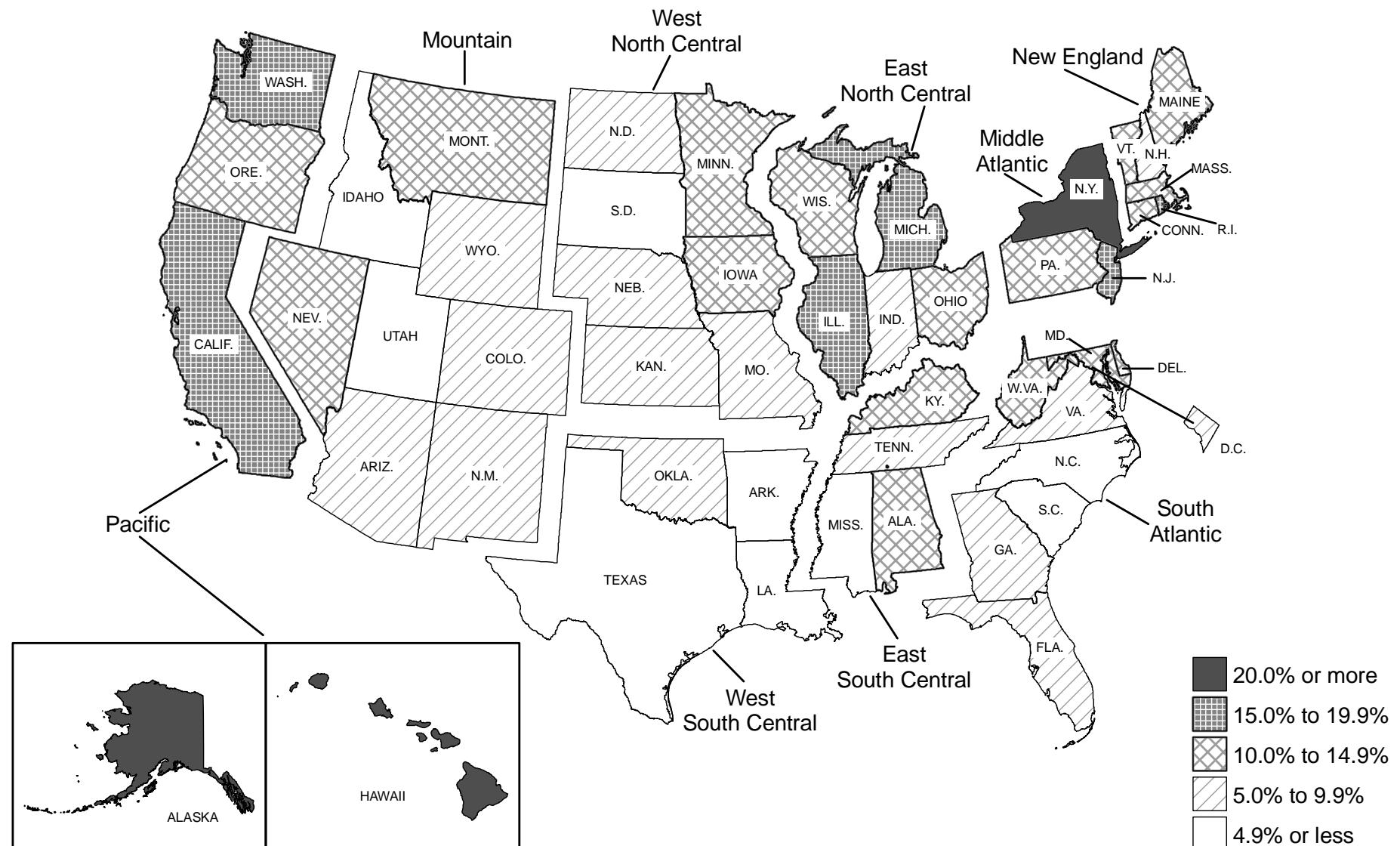
[www.arch.utah.edu/cgi-bin/wordpress-metroresearch/wp-](http://www.arch.utah.edu/cgi-bin/wordpress-metroresearch/wp-content/uploads/2012/publications/working%20papers/Final_Daytime_Population.pdf)

[content/uploads/2012/publications/working%20papers/Final\\_Daytime\\_Population.pdf](http://www.arch.utah.edu/cgi-bin/wordpress-metroresearch/wp-content/uploads/2012/publications/working%20papers/Final_Daytime_Population.pdf).

## EXHIBIT 4

# Chart 1. Union membership rates by state, 2013 annual averages

(U.S. rate = 11.3 percent)



## EXHIBIT 5

# Homeowners: Reduce your 2013 Property Taxes!

## Who is Eligible?

- If you are a low-income homeowner in Detroit, **you may be eligible to have your property taxes for 2013 reduced through a property tax exemption**. To get an exemption, you must fill out an application. *Income guidelines are listed on the back of this flier.*
- **This program is for owner-occupied homes only**, so you must have a recorded deed for the house in order to apply (see back for more information).



## How to Apply!

Please read the information and follow the steps below.

- 1) Go to the City Assessor's office, 8<sup>th</sup> floor, Room 804 of the Coleman A Young Municipal Center (2 Woodward Ave) to request an application for a property tax exemption or poverty exemption. The city will add you to the list and then mail you an application. To have your entire tax bill reduced for 2013, you must request this application between Jan – March 2013. Applications received after this date may only get a partial reduction.
- 2) An application will be mailed to you with a due date stamped on your application. United Community Housing Coalition can help you complete your application. You can visit their office at 220 Bagley, Suite 900, Detroit, MI 48226 on Monday, Wednesday, and Friday from 9:00 – 12:00 p.m. for assistance. You must bring your application with you and all required documentation. Read the last page of the application to make sure you have all the documentation; documentation is also listed on the following page.
- 3) **You could be denied if you do not fill out the application correctly, so we strongly recommend that you visit United Community Housing Coalition (313-963-3310) for assistance.**
- 4) Please note that if you file a property tax exemption, you must file income taxes for this year.



Created by CLEARCorps Detroit, 11148 Harper, Detroit MI 48213

[www.clearcorpsdetroit.org](http://www.clearcorpsdetroit.org); 313-924-4000 (phone); 313-924-4003 (fax)

## CITY OF DETROIT INCOME GUIDELINES

Here are the income guidelines for 2012. Guidelines may change in 2013. Household income is the combined income of everyone in the household.

Household Size	Full Exemption	50% Exemption
1	16,660	19,160
2	19,950	22,450
3	22,100	24,600
4	25,600	28,100
5	27,400	29,900
6	30,000	32,500
7	33,800	35,300
8	37,600	39,100

If there are over 8 people, add \$3000/ person for a full exemption and \$1500/ person for a 50% exemption

Applicants must report all household income and provide proof of income and all savings, and report all vehicles owned. Savings, vehicles, and other assets must be less than \$10,000.

### REQUIRED DOCUMENTATION

You might need the following documents. Start gathering this information and bring this to your meeting with United Community Housing Coalition.

- Copy of deed
- Income tax return
- Proof of income
- Current DTE bill
- Current water bill
- Picture id with your current address
- Report cards for school-aged children
- Other documents mentioned in application

### Other Important Information

**It is very important that you fill out the application correctly or you could be denied.** Please visit the United Communities Housing Coalition for help at 220 Bagley, Suite 900, Detroit, MI 48226 on Monday, Wednesday, and Friday from 9:00 – 12:00 p.m.

**To apply, you must have a Principal Residence Exemption (PRE) and a recorded deed.** To record your deed, go to the Wayne County Register of Deeds, 400 Monroe St, 7<sup>th</sup> floor. You can file a property transfer affidavit and Principle Residence Exemption at the City Assessor's office (Coleman A. Young Building, 8<sup>th</sup> floor, please bring a copy of your deed). You must file the affidavit within 45 days of signing the deed or you will have to pay a fee (up to \$200) to file.

While this will help you to reduce your 2013 taxes, this does not reduce any existing tax debt. **If you are facing tax foreclosure, there may be some additional resources to help you address your tax debt.** Please contact Michigan Legal Services at 313-964-4130 to learn more about resources to prevent tax foreclosure.

## EXHIBIT 6

# Reference Book

Information Relating to  
Real Estate Practice,  
Licensing and Examinations



LDA — ISBN 0-916478-02-5

*Published and Distributed by*  
State of California, Department of Real Estate

Appraisal Client. USPAP defines the client as follows: "The party or parties who engage an appraiser (by employment or contract) in a specific assignment." USPAP further comments on the client: "The client identified by the appraiser in appraisal, appraisal review, or appraisal consulting assignment (or in the assignment workfile) is the party or parties with whom the appraiser has an appraiser-client relationship in the related assignment, and may be an individual, group, or entity."

**Confidentiality.** The Confidentiality Section of the Ethics Rule in USPAP states that the appraiser must protect the confidential nature of the appraiser-client relationship. This is significant because the appraiser must not disclose confidential information in the report or the assignment results to anyone other than the client or persons authorized by the client. Note that the state appraiser regulatory agencies and third parties duly authorized by law are also authorized to obtain the confidential information found in an appraisal report. This prohibits the appraiser from discussing assignment results or providing copies of the appraisal reports to agents or borrowers unless they are the client identified in the appraisal report.

**Four elements of value.** There are four elements of value, all of which are essential. These are utility, scarcity, demand (together with financial ability to purchase), and transferability. None alone will create value, but all must be present to achieve value for a property. For example, a thing may be scarce but, if it has no utility, there is no demand for it. Other things, like air, may have utility and may be in great demand, but are so abundant as to have no commercial value. *Utility* is the capacity of a commodity to satisfy a need or desire. To have utility value, real estate should have the ability to provide shelter, income, amenities or whatever use is being sought. Functional utility is an important test for determining value. Likewise, the commodity must be transferable as to use or title to be marketable.

Generally speaking, a commodity will have commercial or marketable value in proportion to its utility and relative scarcity. Scarcity is the present or anticipated supply of a product in relation to the demand for it. Utility creates demand, but demand, to be effective, must be implemented by purchasing power. Otherwise, a person desiring a product cannot acquire it.

Real estate cycles cause fluctuations in the four elements of value. For example, when interest rates increase, fewer buyers are able to qualify for loans. This in turn reduces demand for real estate. This may lead to an over-supply of properties for sale (or a lack of scarcity).

## **FORCES INFLUENCING VALUE**

The value of real estate is created, maintained, modified and destroyed by the interplay of the following four great forces:

1. **Environmental and physical characteristics.** Examples of physical characteristics include: quality of conveniences; availability of schools, shopping, public transportation, churches; similarity of land used; and types of physical hazards. Environmental considerations include climate, soil and topography, barriers to future development (oceans, mountains, etc.), transportation systems, and access to other areas/regions.
2. **Social ideals and standards.** Examples of social forces include: population growth and decline; age, marriage, birth, divorce and death rates; and attitudes toward education, recreation, and other instincts and yearnings of mankind.
3. **Economic influences.** Examples of economic forces are: natural resources; industrial and commercial trends; employment trends; wage levels; availability of money and credit; interest rates; price levels; tax loads; regional and community present economic base; new development trends; and rental and price patterns.
4. **Political or government regulations.** Examples of political forces include: building codes; zoning laws; public health measures; fire regulations; rent controls; environmental legislation controlling types of new development; fiscal policies; monetary policies; government guaranteed loans; government housing; and credit controls.

Each and every one of these many physical, social, economic and political factors affect cost, price, and value to some degree. The four forces interweave and each one is in a constant state of change.

**Factors Influencing Value**

**Directional growth.** In any estimate of value, attention should be given to “the city directional growth” as well as to “Urban Renewal Plans.” The city directional growth refers to the manner and direction in which the city tends to expand.

Properties in the direction of growth or renewal in different sections of the city tend to increase in value, especially if the growth or renewal is steady and rapid.

**Location.** Location is an exceptionally important value factor because location influences demand for the property. Location must not be described too generally, and is an effective value factor only when it is specifically related to highest and best use. Brokers often claim, “The three most important characteristics for any property are location, location and location.”

**Utility.** Utility includes the capacity to produce. Another word for utility is “usefulness.” This important factor involves judgment as to the best use to which a given property may be put. Building restrictions and zoning ordinances affect utility.

**Size.** The width and depth of a parcel of land will often determine the possibilities and character of its use.

**Corner influence.** Corner sites sometimes have higher unit value than a site fronting on one street only. Disadvantages include loss of privacy, higher cost as off-site improvements cost more and lot maintenance is more expensive, and setbacks may require a smaller size house. Commercial properties benefit from corner sites because of easy access and added exposure.

**Shape.** Parcels of land of irregular shape generally cannot be developed as advantageously as rectangular lots.

**Thoroughfare conditions.** The width of streets, traffic congestion, and condition of pavement have an effect on the value of frontage properties and to a lesser degree on other properties in the neighborhood. Highly trafficked streets are conducive to value for commercial properties but negatively affect value for residential uses.

**Exposure.** The south and west sides of business streets are usually preferred by merchants because pedestrians seek the shady side of the street on warm afternoons and merchandise displayed in the windows is not damaged by the sun. This traditional view in older commercial districts is somewhat offset by new architectural concepts (e.g., shopping malls), parking and convenience.

**Character of business climate.** Larger cities develop residential, shopping, financial, wholesale, and industrial districts.

**Plottage or assemblage.** An added increment of value when several parcels of land are combined under one ownership to produce greater utility than when the parcels are under separate ownership.

In highly urbanized multiple residential and commercial areas plottage, or assemblage, makes it possible to gain that higher utility. An example of this would be a density bonus for the combining of residential lots. This principle may also apply to light industrial areas.

**Topography and character of soil.** The bearing qualities of the soil may affect construction costs. Extensive foundations are usually necessary in soft earth. The type and condition of the topsoil affect the growth of grass, plants, shrubs and trees. Value may also be influenced by land contour and grades, drainage and view points.

**Obsolescence.** Appraisers consider two types of obsolescence: functional and external. External obsolescence is caused by external factors or economic changes outside the boundaries of a property. External obsolescence is not curable.

Functional obsolescence is caused by either a deficiency or a superadequacy. An example of a superadequacy, or over-improvement, would be a swimming pool that costs \$60,000 to construct while the market is only willing to pay \$10,000 for the pool. Functional obsolescence is categorized as curable or incurable. Curable functional obsolescence will provide a positive return if repaired. This occurs when it costs less to correct the deficiency than the market is willing to pay for it. An example would be the replacement of a heating system that would cost \$3,000 when the market is willing to pay \$10,000 for a home with the new system. Incurable functional obsolescence occurs when it would cost more to correct a deficiency than the market is willing to pay

for the correction. Changes in types and methods of construction, style of architecture, or interior arrangements for specific purposes may render a particular building out of date. Changes in the uses of neighboring property may also contribute to the obsolescence of a building. Careful appraisal will consider the potential for remodeling, refurbishing or other method to restore value.

**Building restrictions and zones.** These sometimes operate to depress values and at other times to increase values.

For example, there may be a vacant lot on a residential street which will sell for only \$150 a front foot for single family residential use but would sell for \$600 per front foot as an apartment site. Or a vacant lot in a zoned area may sell for more per front foot as a business site because of the supply of business sites being restricted by zoning.

**Tract layouts.** In the study and valuation of unimproved but potentially valuable industrial lands, it is often necessary to have the assistance of a competent engineer who is familiar with plant and tract layouts.

#### ***Additional Factors Important for Agricultural or Farm Lands***

Present trends show larger and fewer farms, fewer farm buildings per acre, and fewer family-style operations. The type of buildings an appraiser usually finds on agricultural lands include residences, machine sheds, poultry sheds, multifunctional barns, silos, and various animal shelters. According to some experts in the field, farm buildings contribute less than 20% of the total property value.

One important factor in estimating the value of agricultural land is the nature and long-term trend of costs and prices for the crop grown or intended to be grown. For example, if the property is to be used as a dairy farm the appraiser must consider: whether the soil is suitable for hay and grain; water supply for the cattle and crops; proximity to markets; climatic conditions; labor conditions, etc.

Farm land valuation is highly specialized and often requires the assistance of soil and crop experts and appraisal specialists to evaluate irrigation systems and other equipment and machinery.

### **ECONOMIC TRENDS AFFECTING REAL ESTATE VALUE**

#### ***Regional, National and Global Economics***

Property values increase, decrease, or remain stable based on the interaction of the four forces influencing value. Appraisers must examine and evaluate these forces.

Economic trends and forces at higher levels (regional, national and international) affect property values at the local level. The real estate appraiser must recognize that the general pattern of statistical analysis that guides in interpreting value influences on a national level should be used in the general analysis of state and regional forces which in turn influence local property values.

An appraiser should follow national and regional economic trends, changes in national income levels, international developments and government financing policies because as recent events have shown the greater the severity and duration of any economic swing, the wider and deeper is its influence. Conditions to be observed include: gross national product; balance of payments to other countries; national income levels; employment; price level indexes; interest rates; fiscal and monetary policies; building starts; and credit availability.

#### ***Factors Influencing City Growth and Development***

An appraiser is constantly concerned with the conditions and prospects of the local economy because the value of local real estate is largely determined by the health of the community, as measured by household purchasing power, population changes, employment diversification and stability, wage and price levels, and area growth potential, including environmental conditions.

Cities are classified generally by the functions that stimulate and determine their potential and growth. These classifications are:

**Commercial.** Primary source of revenue stems from commercial enterprises. These are usually farming cities, cities located at railroad terminals or on ocean ports.

**Industrial.** Primary source of revenue is derived from manufacturing and processing of commodities.

**Extractive industry.** Primary source of revenue comes from natural resources, e.g., mining, fishing and lumber.

**Political.** Primary source of revenue is government employment.

**Recreation and health.** Primary source of revenue comes from tourist trade, vacation and health resorts.

**Education.** The anchor point of these cities is a college or university.

#### *Population Trends*

Because of the direct relationship existing between the value of real property and population growth, the appraiser should be concerned with population trends and other demographic factors affecting local population, such as: opportunities for employment; quality of local government; civic and social conditions; demand for goods and services; transportation and living conditions; and, opportunities for education and personal improvement.

#### *Neighborhood Analysis*

A neighborhood may be defined as a group of similar land uses which are similarly affected by the operation of the four forces influencing value: utility, scarcity, demand(desire) and transferability. A common definition for a neighborhood is a grouping together of individuals within the community for similar purposes and interests, whether the reasons be commercial, industrial, residential, cultural or civic. The life cycle of a neighborhood includes growth in desirability, peak desirability, stability for a time, then deterioration. The cycle then tends to turn again as the neighborhood becomes more desirable due to change in use or renewal.

Neighborhood analysis is important because the neighborhood is the setting for the property to be appraised and the property has value, to a large extent, as it contributes to or detracts from the neighborhood.

A neighborhood tends to be a somewhat self-contained community, frequently defined by physical boundaries such as hills, freeways, or major streets and usually with some sense of community. In urban areas, the neighborhood tends to become somewhat blurred due to modern transportation and area-wide cultural, educational, recreational, and commercial services. In analyzing the "neighborhood" of the parcel to be appraised, a good starting point is to ascertain the community identity and boundaries.

After defining, even in vague terms, this community identity, an appraiser will look to common services and features, such as local shopping, street patterns, zoning boundaries, and cultural, religious, educational and recreational services. In short, an appraiser searches the local area by observation and through government and public utility investigation to find the factors most affecting use and value patterns in the area.

Neighborhood analysis also tends to define the best search area for comparable market data. As the appraisal progresses, the appraiser may extend or contract this search area.

Some sources of neighborhood data:

1. U.S. Census tract maps and data (local library or vendors).
2. City and county population demographics (planning departments).
3. City, county, and state street and highway systems (city, county and state road/engineering/highway departments).
4. Local zoning and general planning, including community plans (planning departments).
5. School locations, capacities, policies (local school districts).
6. Public utility services: water, sewer, natural gas, electric power, telephone (local public utility companies and government agencies).
7. City and county economic statistics (local chambers of commerce).
8. Local tax information (county tax assessor).
9. If pertinent, private wells and septic laws (local health departments); national forest/park laws (local forestry and park dept.), etc.

## EXHIBIT 7

## S&P/CASE-SHILLER HOME PRICE INDICES: 2011 YEAR IN REVIEW

**Exhibit 8: S&P/Case-Shiller Home Price versus Condo Indices**

Metropolitan Area	December/November Homes	December/November Condos	One-Year Change Homes	One-Year Change Condos
Boston	-1.2%	-1.2%	-2.6%	-2.4%
Chicago	-2.0%	-4.8%	-6.5%	-12.3%
Los Angeles	-1.1%	-1.0%	-5.2%	-7.5%
New York	-1.2%	-0.7%	-2.9%	-0.2%
San Francisco	-0.8%	-1.9%	-5.4%	-7.3%

Source: S&P Indices and Fiserv. Data through December 2011. Past performance is not an indication of future results.

Exhibit 9 illustrates more of the regional differences across markets using Chicago and New York as examples (note: the indices were rebased to January 1995 = 100). In Chicago, condominiums closely followed the downturn in single-family home prices. Both markets peaked in late 2006 and registered some sharp annual declines, particularly in early 2009. At their lows, home prices in Chicago were down 18.7% on an annual basis and condos were down 15.7%. More recently, both a slump in home and condo prices in Chicago has resurged after a modest early 2011 pickup. As of December 2011, home prices in Chicago were down 6.5%, the third-worst annual rate of all 20 MSAs, and condo prices were down 12.3%, the worst of the five reported condo markets.

**Exhibit 9: S&P/Case-Shiller Home Prices and Condo Indices (Chicago vs. New York)**



Sources: S&P Indices and Fiserv. Data through December 2011. Past performance is not an indication of future results.

While New York's condo market also peaked in mid-2006, it remained relatively stable for the five following years (as illustrated by the relatively flat New York condos from 2006 to 2011). In 2009, however, the NY condo market started to mimic its single-family home counterpart, posting its lowest annual rate of decline at 12.1% in August 2009, versus the single-family home low of -12.3% in April 2009. After this trough, the condo market in New York stabilized again. As of December 2011, New York condo prices were registering a -0.2% annual return, well above Chicago's condo market and both New York's and Chicago's single-family home markets. The New York condo market has so far retained more of its value since January 2000. When based to January 2000 = 100, the December 2011 index level was 195.80, close to twice the average value of condos in 2000.

## EXHIBIT 8

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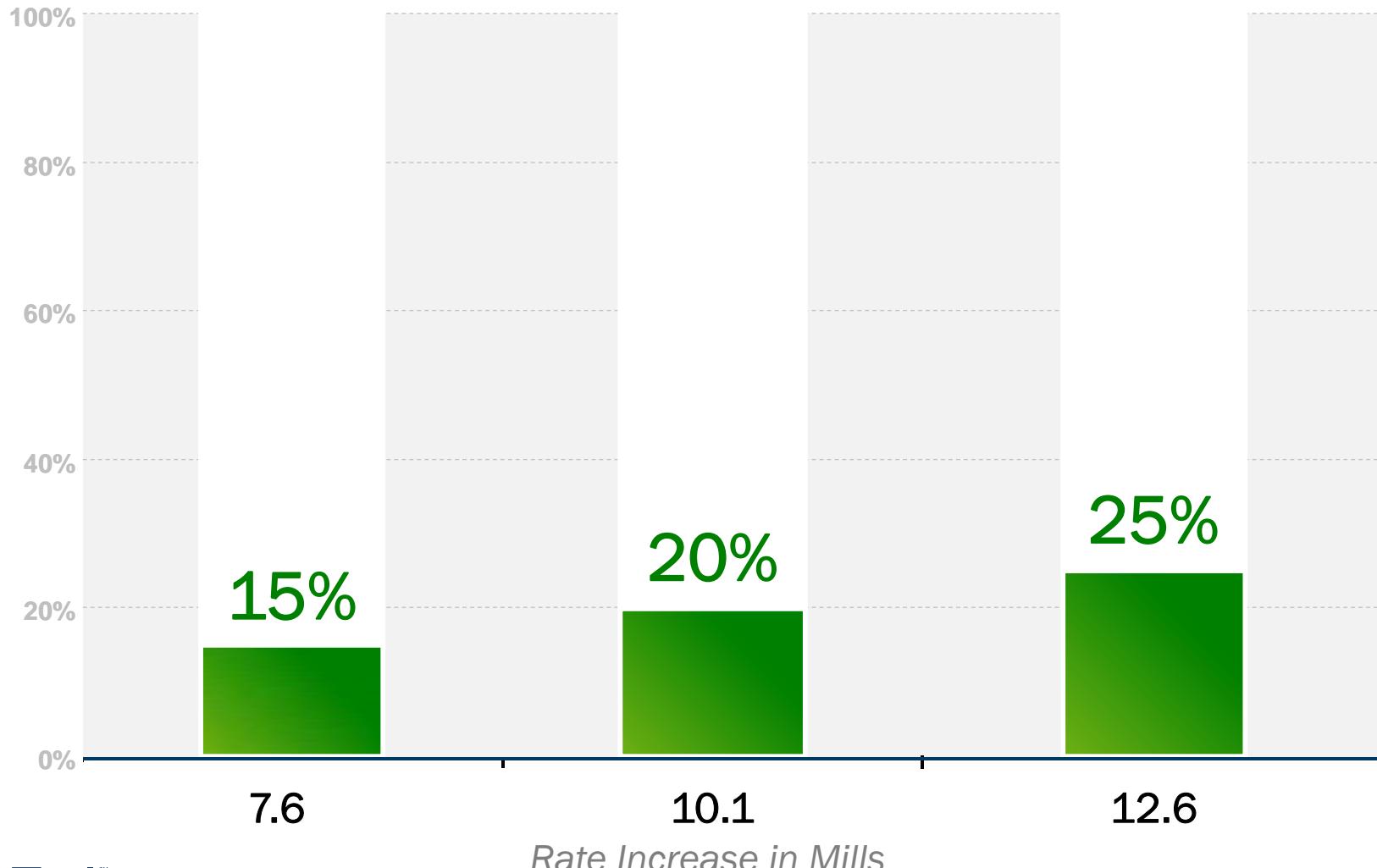
## EXHIBIT 9

## Ten-Year Property Tax Increase: Homeowner Burden



\$10K  
Income  
(2012)

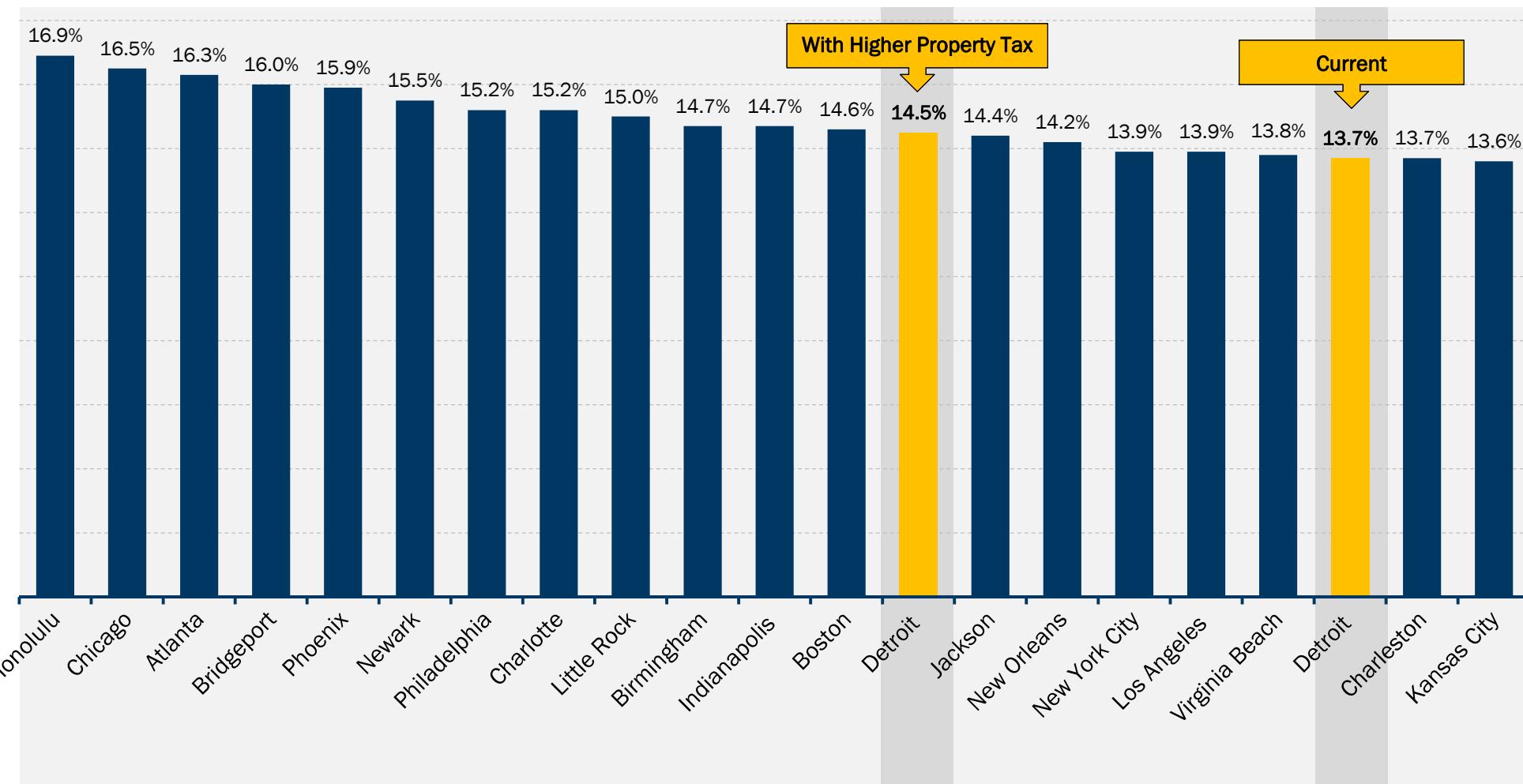
% of Average Annual Expenditure on Entertainment, \$10K Income Family, 2012



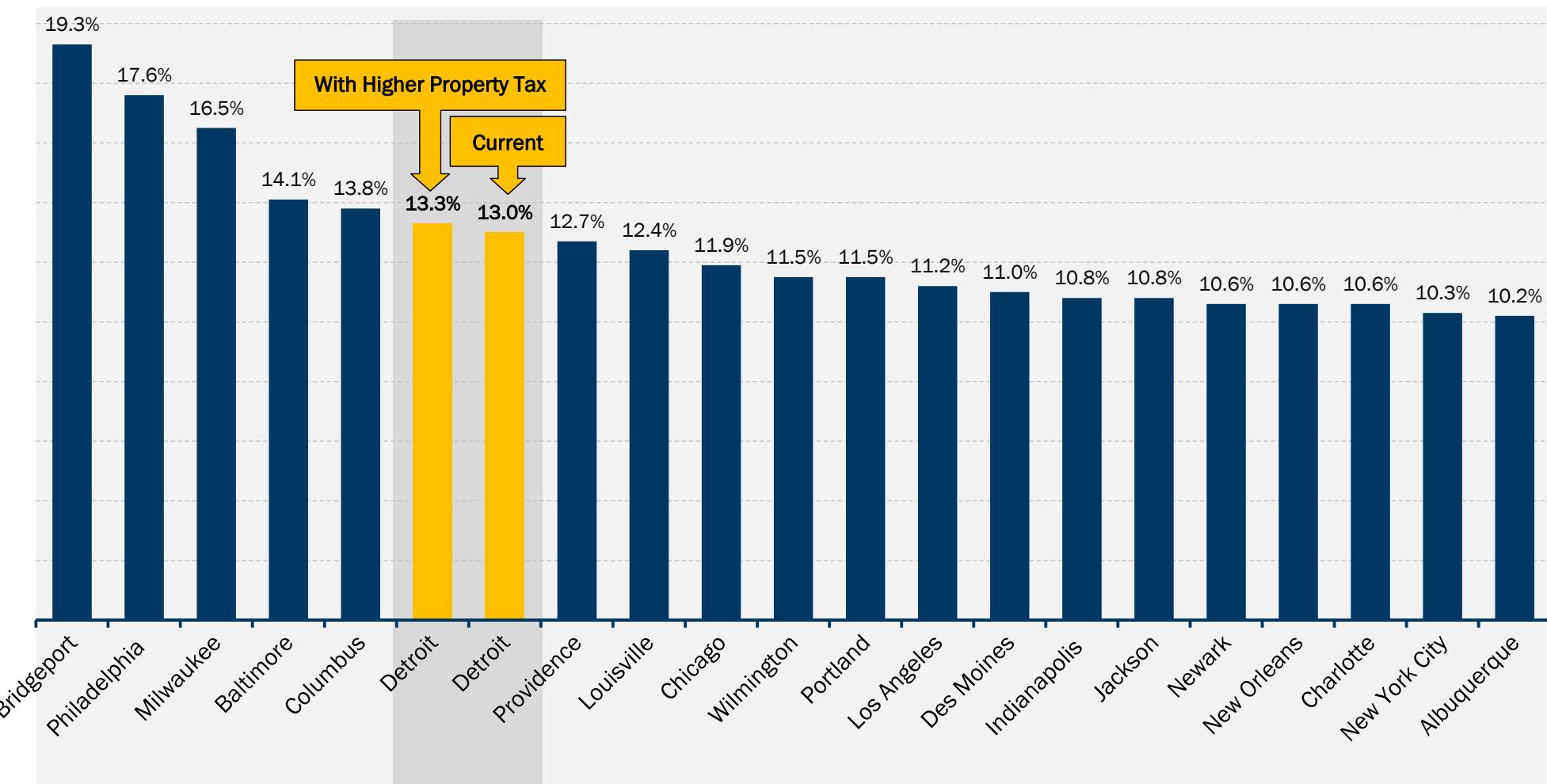
## Ten-Year Property Tax Increase: Homeowner Burden



## Estimated Burden of Major Taxes For a Hypothetical Family of 3 (2012, \$25,000 Income)



## Estimated Burden of Major Taxes For a Hypothetical Family of 3 (2012, \$50,000 Income)

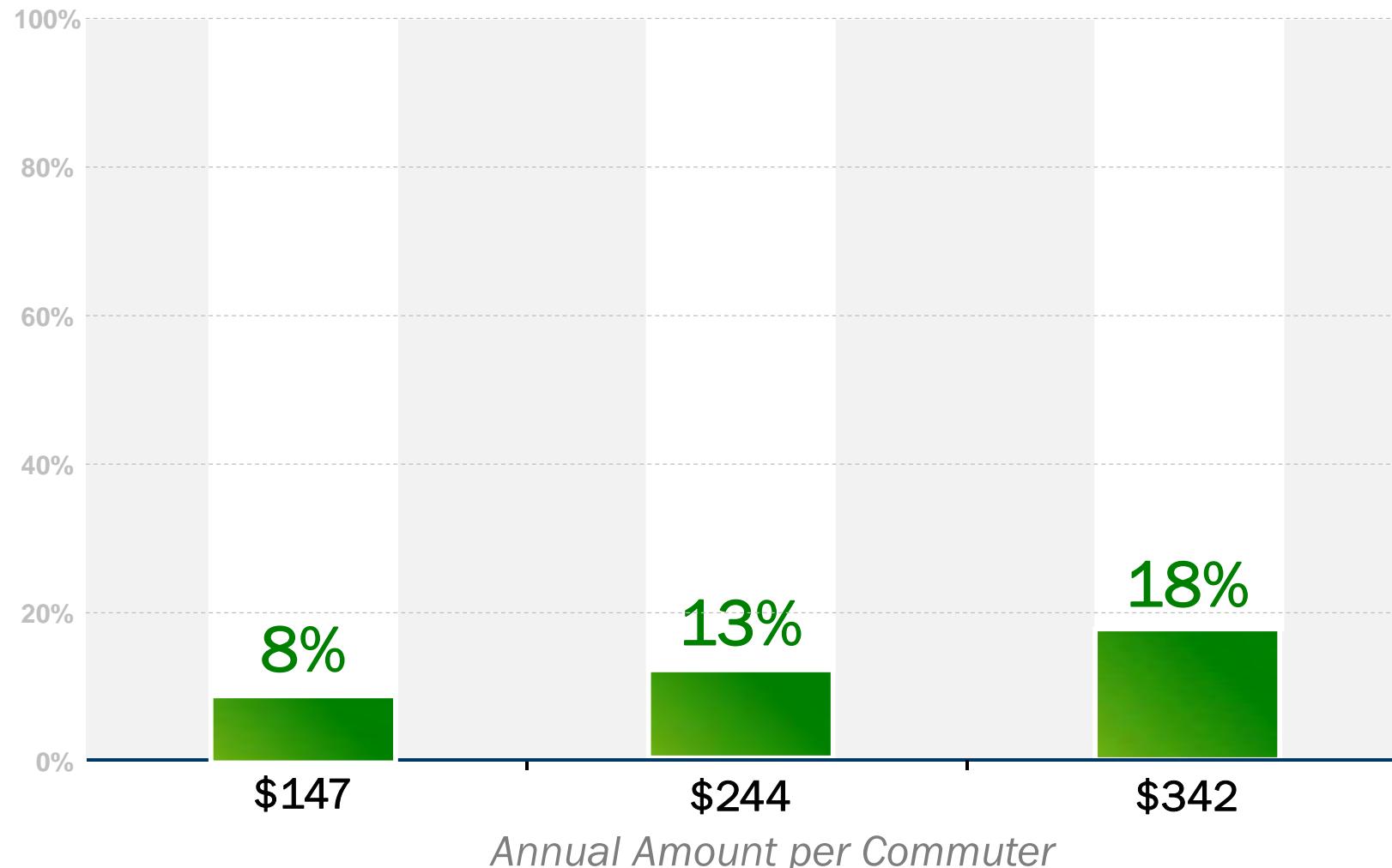




\$45,000  
Income  
(2012)

## Inbound Commuter Tax

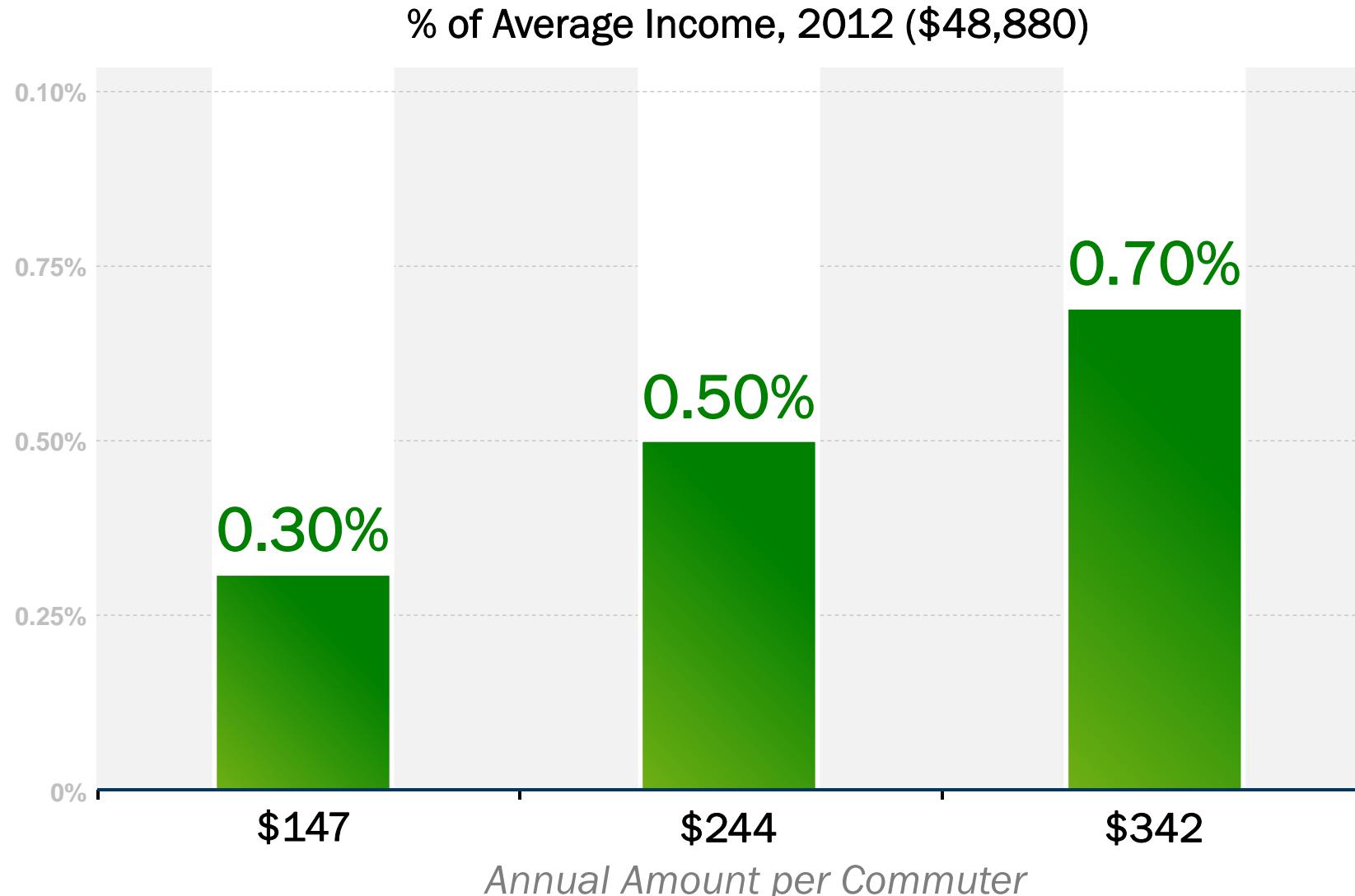
Percentage of Average Annual Expenditure on Entertainment, \$45,000 Income, 2012





\$48,880  
Income\*  
(2012)

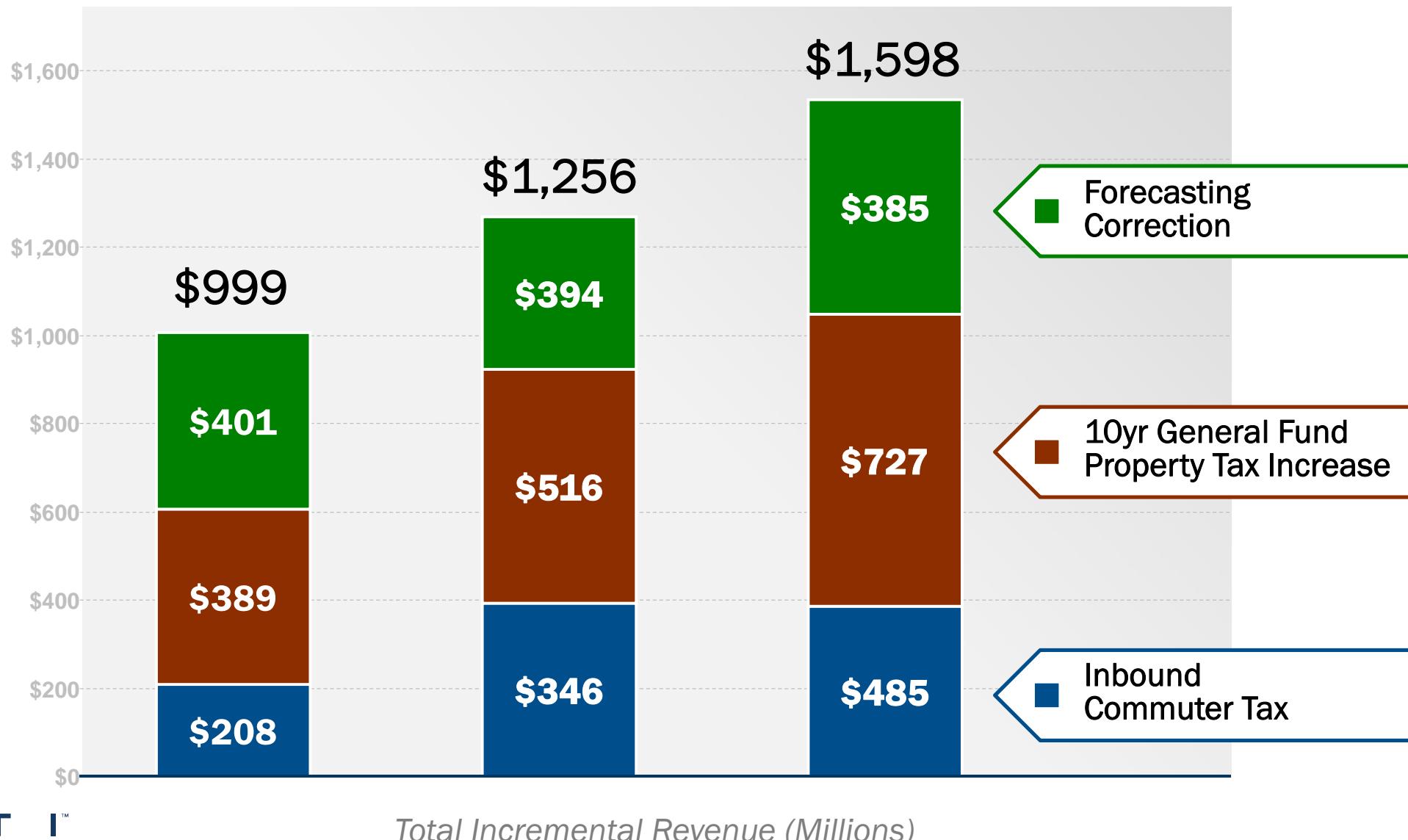
## Inbound Commuter Tax



\* Based on average annual wages and average annual hours for employees in the Detroit-Livonia-Dearborn, Michigan Metropolitan Division in 2012

13-53846-tjt Doc 6901 Filed 08/20/14 Entered 08/20/14 15:09:01 Page 156 of 265

## Estimated Incremental General Fund Revenue Through FY 2023 *(Excluding Potential Added Income Tax Revenue)*



## SCHEDULES

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Schedule 1.0 - Incremental Revenue Summary Through FY 2023

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**1) Forecasting Corrections 2014-2023**

	<b>38.03% Increase<sup>1</sup></b>	<b>50.71% Increase<sup>2</sup></b>	<b>63.39% Increase<sup>3</sup></b>
Property Tax <sup>4</sup>	\$ 401,377,165	\$ 393,652,269	\$ 385,927,374
<b>Total</b>	<b>\$ 401,377,165</b>	<b>\$ 393,652,269</b>	<b>\$ 385,927,374</b>

**2) Ten-Year Property Tax Increase  
FY 2014-2023**

	<b>38.03% Increase<sup>5</sup></b>	<b>50.71% Increase<sup>6</sup></b>	<b>63.39% Increase<sup>7</sup></b>
Gross Property Tax Revenue Based on FTI Forecast	\$ 519,210,382	\$ 688,363,220	\$ 855,557,413
At 75% Collections Rate (CR)	\$ 389,407,787	\$ 516,272,415	\$ 641,668,059
At 85% Collection Rate (CR)	\$ 441,328,825	\$ 585,108,737	\$ 727,223,801

**3) Potential Commuter Tax Revenue  
FY 2015-2023**

	<b>At \$147 per Year<sup>8</sup></b>	<b>At \$244 per Year<sup>9</sup></b>	<b>At \$342 per Year<sup>10</sup></b>
Yearly Inbound Commuter Surcharge	\$ 25,662,880	\$ 42,771,466	\$ 59,880,053
Commuter Tax Revenue from 2015-2023	\$ 230,965,919	\$ 384,943,198	\$ 538,920,477
At 90% Recovery	\$ 207,869,327	\$ 346,448,878	\$ 485,028,429
<b><u>Total Incremental Revenue Range at 75% CR</u></b>	<b><u>\$ 998,654,278</u></b>	<b><u>\$ 1,256,373,562</u></b>	<b><u>\$ 1,512,623,862</u></b>
<b><u>Total Incremental Revenue Range at 85% CR</u></b>	<b><u>\$ 1,050,575,316</u></b>	<b><u>\$ 1,325,209,884</u></b>	<b><u>\$ 1,598,179,604</u></b>

**Sources/Notes:**

- 1) Property Tax: Schedule 4.0
- 2) Property Tax: Schedule 4.1
- 3) Property Tax: Schedule 4.2
- 4) Incorporates the effect on property values from an increase in the General Fund Property Tax Rate.
- 5) Schedule 3.0
- 6) Schedule 3.1
- 7) Schedule 3.2
- 8) Schedule 2.0
- 9) Schedule 2.1
- 10) Schedule 2.2

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**Schedule 2.0 - Yearly Inbound Commuter Tax Revenue at 0.30% of Annual Income - Flows into Schedule 1.0**

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**Detroit Model**

Average Hourly Wage <sup>1</sup>	\$ 23.50
Average Annual Hours <sup>1</sup>	<u>2,080</u>
Average Annual Income	\$ 48,880
Proposed Annual Commuter Tax as % of Income	0.30%
Proposed Yearly Toll Fee Per Comuter	\$ 146.64
# of Non-Residential Commuters <sup>2</sup>	<u>175,006</u>
Total Annual Wages	\$ 8,554,293,280
<b>Estimated Annual Revenue</b>	<b><u>\$ 25,662,880</u></b>

**Sources/Notes:**

1) Based upon averages from the Bureau of Labor and Statistics, U.S. Department of Labor, December 24, 2013 News Release 13-757-CHI,"Occupational Employment and Wages in Detroit-Livonia-Dearborn, Mich. Metropolitan Division - May 2012," [http://www.bls.gov/oes/2012/may/oes\\_19804.htm](http://www.bls.gov/oes/2012/may/oes_19804.htm).

2) Comparing Detroit's Commuting Patterns with Other Cities', Federal Reserve Bank of Chicago, December 4, 2013, Martin Lavelle and Emmanuel Ogbonna.

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**Schedule 2.1 - Yearly Inbound Commuter Tax Revenue at 0.50% of Annual Income - Flows into Schedule 1.0**

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**Detroit Model**

Average Hourly Wage <sup>1</sup>	\$ 23.50
Average Annual Hours <sup>1</sup>	<u>2,080</u>
Average Annual Income	\$ 48,880
Proposed Annual Commuter Tax as % of Income	0.50%
Proposed Yearly Toll Fee Per Comuter	\$ 244.40
# of Non-Residential Commuters <sup>2</sup>	<u>175,006</u>
Total Annual Wages	\$ 8,554,293,280
<b>Estimated Annual Revenue</b>	<b><u>\$ 42,771,466</u></b>

**Sources/Notes:**

1) Based upon averages from the Bureau of Labor and Statistics, U.S. Department of Labor, December 24, 2013 News Release 13-757-CHI,"Occupational Employment and Wages in Detroit-Livonia-Dearborn, Mich. Metropolitan Division - May 2012," [http://www.bls.gov/oes/2012/may/oes\\_19804.htm](http://www.bls.gov/oes/2012/may/oes_19804.htm).

2) Comparing Detroit's Commuting Patterns with Other Cities', Federal Reserve Bank of Chicago, December 4, 2013, Martin Lavelle and Emmanuel Ogbonna.

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**Schedule 2.2 - Yearly Inbound Commuter Tax Revenue at 0.70% of Annual Income - Flows into Schedule 1.0**

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**Detroit Model**

Average Hourly Wage <sup>1</sup>	\$ 23.50
Average Annual Hours <sup>1</sup>	<u>2,080</u>
Average Annual Income	\$ 48,880
Proposed Annual Commuter Tax as % of Income	0.70%
Proposed Yearly Toll Fee Per Comuter	\$ 342.16
# of Non-Residential Commuters <sup>2</sup>	<u>175,006</u>
Total Annual Wages	\$ 8,554,293,280
<b>Estimated Annual Revenue</b>	<b><u>\$ 59,880,053</u></b>

**Sources/Notes:**

1) Based upon averages from the Bureau of Labor and Statistics, U.S. Department of Labor, December 24, 2013 News Release 13-757-CHI,"Occupational Employment and Wages in Detroit-Livonia-Dearborn, Mich. Metropolitan Division - May 2012," [http://www.bls.gov/oes/2012/may/oes\\_19804.htm](http://www.bls.gov/oes/2012/may/oes_19804.htm).

2) Comparing Detroit's Commuting Patterns with Other Cities', Federal Reserve Bank of Chicago, December 4, 2013, Martin Lavelle and Emmanuel Ogbonna.

Schedule 3.0 - Incremental Revenue Increase from 38.03% Increase in the General Fund Property Tax Rate - Flows into Schedule 1.0											
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total
FTI Forecasted Property Tax Revenue <sup>1</sup>	\$ 119,712,316	\$ 124,471,867	\$ 127,396,179	\$ 131,155,336	\$ 134,617,926	\$ 138,250,428	\$ 141,861,268	\$ 145,529,890	\$ 149,224,136	\$ 152,957,819	\$ 1,365,177,165
Millage Factor <sup>2</sup>	38.03%	38.03%	38.03%	38.03%	38.03%	38.03%	38.03%	38.03%	38.03%	38.03%	38.03%
Tax Revenue Increase <sup>3</sup>	\$ 45,529,532	\$ 47,339,706	\$ 48,451,894	\$ 49,881,593	\$ 51,198,501	\$ 52,580,031	\$ 53,953,322	\$ 55,348,589	\$ 56,753,602	\$ 58,173,613	\$ 519,210,382

**Sources/Notes:**

1) Schedule 5.0

2) Schedule 7.0

3) Tax Revenue incremental increase assumes that the property values have been adjusted to consider the effects of a 38.03 percent increase to the property tax rate.

## Schedule 3.1 - Incremental Revenue Increase from 50.71% Increase in the General Fund Property Tax Rate - Flows into Schedule 1.0

	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>Total</b>
FTI Forecasted Property Tax Revenue <sup>1</sup>	\$ 118,416,421	\$ 123,263,117	\$ 126,300,040	\$ 130,171,089	\$ 133,754,788	\$ 137,514,098	\$ 141,258,745	\$ 145,067,784	\$ 148,909,245	\$ 152,796,943	\$ 1,357,452,269
Millage Factor <sup>2</sup>	50.71%	50.71%	50.71%	50.71%	50.71%	50.71%	50.71%	50.71%	50.71%	50.71%	50.71%
Tax Revenue Increase	\$ 60,048,895	\$ 62,506,651	\$ 64,046,673	\$ 66,009,680	\$ 67,826,972	\$ 69,733,316	\$ 71,632,224	\$ 73,563,785	\$ 75,511,787	\$ 77,483,237	\$ 688,363,220

**Sources/Notes:**

1) Schedule 5.0

2) Schedule 7.0

3) Tax Revenue incremental increase assumes that the property values have been adjusted to consider the effects of a 50.71 percent increase to the property tax rate.

Schedule 3.2 - Incremental Revenue Increase from 63.39% Increase in the General Fund Property Tax Rate - Flows into Schedule 1.0											
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total
FTI Forecasted Property Tax Revenue <sup>1</sup>	\$ 117,120,526	\$ 122,054,367	\$ 125,203,901	\$ 129,186,842	\$ 132,891,651	\$ 136,777,769	\$ 140,656,222	\$ 144,605,677	\$ 148,594,353	\$ 152,636,067	\$ 1,349,727,374
Millage Factor <sup>2</sup>	63.39%	63.39%	63.39%	63.39%	63.39%	63.39%	63.39%	63.39%	63.39%	63.39%	63.39%
Tax Revenue Increase	\$ 74,239,684	\$ 77,367,119	\$ 79,363,527	\$ 81,888,211	\$ 84,236,594	\$ 86,699,904	\$ 89,158,356	\$ 91,661,814	\$ 94,190,133	\$ 96,752,071	\$ 855,557,413

**Sources/Notes:**

1) Schedule 5.0

2) Schedule 7.0

3) Tax Revenue incremental increase assumes that the property values have been adjusted to consider the effects of a 63.39 percent increase to the property tax rate.

## Schedule 4.0 - Difference Between the City of Detroit's General Fund Property Tax Revenue Forecasts and FTI's Property Tax Revenue Forecasts based on 38.03% Increase - Flows into Schedule 1.0

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total
<b>Property Tax</b>											
FTI Forecasted Property Tax Revenue based on 38.03%											
Tax Rate Increase <sup>1</sup>	\$ 119,712,316	\$ 124,471,867	\$ 127,396,179	\$ 131,155,336	\$ 134,617,926	\$ 138,250,428	\$ 141,861,268	\$ 145,529,890	\$ 149,224,136	\$ 152,957,819	\$ 1,365,177,165
City Forecast <sup>2</sup>	114,900,000	102,600,000	99,200,000	96,800,000	94,900,000	93,100,000	90,200,000	90,100,000	90,700,000	91,300,000	963,800,000
Difference	\$ 4,812,316	\$ 21,871,867	\$ 28,196,179	\$ 34,355,336	\$ 39,717,926	\$ 45,150,428	\$ 51,661,268	\$ 55,429,890	\$ 58,524,136	\$ 61,657,819	\$ 401,377,165

**Sources/Notes:**

- 1) Schedule 5.0  
 2) Schedule 9.0

## Schedule 4.1 - Difference Between the City of Detroit's General Fund Property Tax Revenue Forecasts and FTI's Property Tax Revenue Forecasts based on 50.71% Increase - Flows into Schedule 1.0

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total
<b>Property Tax</b>											
FTI Forecasted Property Tax Revenue based on 50.71%											
Tax Rate Increase <sup>1</sup>	\$ 118,416,421	\$ 123,263,117	\$ 126,300,040	\$ 130,171,089	\$ 133,754,788	\$ 137,514,098	\$ 141,258,745	\$ 145,067,784	\$ 148,909,245	\$ 152,796,943	\$ 1,357,452,269
City Forecast <sup>2</sup>	114,900,000	102,600,000	99,200,000	96,800,000	94,900,000	93,100,000	90,200,000	90,100,000	90,700,000	91,300,000	963,800,000
Difference	\$ 3,516,421	\$ 20,663,117	\$ 27,100,040	\$ 33,371,089	\$ 38,854,788	\$ 44,414,098	\$ 51,058,745	\$ 54,967,784	\$ 58,209,245	\$ 61,496,943	\$ 393,652,269

## Sources/Notes:

- 1) Schedule 5.0  
 2) Schedule 9.0

## Schedule 4.2 - Difference Between the City of Detroit's General Fund Property Tax Revenue Forecasts and FTI's Property Tax Revenue Forecasts based on 63.39% Increase - Flows into Schedule 1.0

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total
<b>Property Tax</b>											
FTI Forecasted Property Tax Revenue based on 63.39%											
Tax Rate Increase <sup>1</sup>	\$ 117,120,526	\$ 122,054,367	\$ 125,203,901	\$ 129,186,842	\$ 132,891,651	\$ 136,777,769	\$ 140,656,222	\$ 144,605,677	\$ 148,594,353	\$ 152,636,067	\$ 1,349,727,374
City Forecast <sup>2</sup>	114,900,000	102,600,000	99,200,000	96,800,000	94,900,000	93,100,000	90,200,000	90,100,000	90,700,000	91,300,000	963,800,000
Difference	\$ 2,220,526	\$ 19,454,367	\$ 26,003,901	\$ 32,386,842	\$ 37,991,651	\$ 43,677,769	\$ 50,456,222	\$ 54,505,677	\$ 57,894,353	\$ 61,336,067	\$ 385,927,374

**Sources/Notes:**

- 1) Schedule 5.0  
 2) Schedule 9.0

Schedule 5.0 - FTI's Forecasts of Detroit's General Fund Tax Revenues - Flows into Schedule 3.0, 3.1, 3.2, 4.0, 4.1, and 4.2										
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
<b>Property Tax</b>										
FTI Forecasted Property Tax Revenue based on 38.03% Tax Rate Increase <sup>1</sup>	\$ 119,712,316	\$ 124,471,867	\$ 127,396,179	\$ 131,155,336	\$ 134,617,926	\$ 138,250,428	\$ 141,861,268	\$ 145,529,890	\$ 149,224,136	\$ 152,957,819
FTI Forecasted Property Tax Revenue based on 50.71% Tax Rate Increase <sup>2</sup>	\$ 118,416,421	\$ 123,263,117	\$ 126,300,040	\$ 130,171,089	\$ 133,754,788	\$ 137,514,098	\$ 141,258,745	\$ 145,067,784	\$ 148,909,245	\$ 152,796,943
FTI Forecasted Property Tax Revenue based on 63.39% Tax Rate Increase <sup>3</sup>	\$ 117,120,526	\$ 122,054,367	\$ 125,203,901	\$ 129,186,842	\$ 132,891,651	\$ 136,777,769	\$ 140,656,222	\$ 144,605,677	\$ 148,594,353	\$ 152,636,067

**Sources/Notes:**

- 1) Schedule 6.0  
 2) Schedule 6.1  
 3) Schedule 6.2

## Schedule 6.0 - Adjustments Made to Property Tax Forecasts due to a Tax Rate Increase of 38.03% - Flows into Schedule 5.0

<b>2013 Detroit Property Taxes Levied<sup>1</sup></b>	156,100,000
<b>2013 Detroit State Equalized Value<sup>2</sup></b>	9,437,451,598
<b>2013 Effective Tax Rate</b>	0.016540482
<b>2013 Effective Tax Rate Relative to Approximate Property Market Values</b>	0.008270241
<b>Tax Rate Increase<sup>3</sup></b>	38.03%
<b>2013 Effective Tax Rate Relative to Property Values and Tax Rate Increase</b>	0.003145376

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Period Factor	10	9	8	7	6	5	4	3	2	1
Yearly Effect on Property Values	0.0315	0.0283	0.0252	0.0220	0.0189	0.0157	0.0126	0.0094	0.0063	0.0031
Property Value Decrease Factor	0.968546	0.971692	0.974837	0.977982	0.981128	0.984273	0.987418	0.990564	0.993709	0.996855
FTI Property Tax Revenue Forecast <sup>4</sup>	\$ 123,600,000	\$ 128,098,117	\$ 130,684,596	\$ 134,108,078	\$ 137,207,337	\$ 140,459,416	\$ 143,668,838	\$ 146,916,210	\$ 150,168,811	\$ 153,440,447
Forecasted Property Tax Revenue with Tax Increase Effect	\$ 119,712,316	\$ 124,471,867	\$ 127,396,179	\$ 131,155,336	\$ 134,617,926	\$ 138,250,428	\$ 141,861,268	\$ 145,529,890	\$ 149,224,136	\$ 152,957,819

**Sources/Notes:**

1) Fourth Amended Disclosure Statement with Respect to Fourth Amended Plan for the Adjustment of Debts of the City of Detroit Case No. 13-53846, Document 4391-2 dated May 5, 2014, page 157 of 212.

2) City of Detroit State Equalized Valuations, [http://www.detroitmi.gov/Portals/0/docs/budgetdept/2012-13%20Redbook/Charts/XX\\_State%20Equalized%20Valuations.pdf](http://www.detroitmi.gov/Portals/0/docs/budgetdept/2012-13%20Redbook/Charts/XX_State%20Equalized%20Valuations.pdf).

3) Schedule 7.0

4) Schedule 8.0

## Schedule 6.1 - Adjustments Made to Property Tax Forecasts due to a Tax Rate Increase of 50.71% - Flows into Schedule 5.0

<b>2013 Detroit Property Taxes Levied<sup>1</sup></b>	156,100,000
<b>2013 Detroit State Equalized Value<sup>2</sup></b>	9,437,451,598
<b>2013 Effective Tax Rate</b>	0.016540482
<b>2013 Effective Tax Rate Relative to Property Values</b>	0.008270241
<b>Tax Rate Increase<sup>3</sup></b>	50.71%
<b>2013 Effective Tax Rate Relative to Property Values and Tax Rate Increase</b>	0.004193834

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Period Factor	10	9	8	7	6	5	4	3	2	1
Yearly Effect on Property Values	0.0419	0.0377	0.0336	0.0294	0.0252	0.0210	0.0168	0.0126	0.0084	0.0042
Property Value Decrease Factor	0.958062	0.962255	0.966449	0.970643	0.974837	0.979031	0.983225	0.987418	0.991612	0.995806
FTI Property Tax Revenue Forecast <sup>4</sup>	\$ 123,600,000	\$ 128,098,117	\$ 130,684,596	\$ 134,108,078	\$ 137,207,337	\$ 140,459,416	\$ 143,668,838	\$ 146,916,210	\$ 150,168,811	\$ 153,440,447
Forecasted Property Tax Revenue with Tax Increase Effect	\$ 118,416,421	\$ 123,263,117	\$ 126,300,040	\$ 130,171,089	\$ 133,754,788	\$ 137,514,098	\$ 141,258,745	\$ 145,067,784	\$ 148,909,245	\$ 152,796,943

**Sources/Notes:**

1) Fourth Amended Disclosure Statement with Respect to Fourth Amended Plan for the Adjustment of Debts of the City of Detroit Case No. 13-53846, Document 4391-2 dated May 5, 2014, page 157 of 212.

2) City of Detroit State Equalized Valuations, [http://www.detroitmi.gov/Portals/0/docs/budgetdept/2012-13%20Redbook/Charts/XX\\_State%20Equalized%20Valuations.pdf](http://www.detroitmi.gov/Portals/0/docs/budgetdept/2012-13%20Redbook/Charts/XX_State%20Equalized%20Valuations.pdf).

3) Schedule 7.0

4) Schedule 8.0

## Schedule 6.2 - Adjustments Made to Property Tax Forecasts due to a Tax Rate Increase of 63.39% - Flows into Schedule 5.0

<b>2013 Detroit Property Taxes Levied<sup>1</sup></b>	156,100,000
<b>2013 Detroit State Equalized Value<sup>2</sup></b>	9,437,451,598
<b>2013 Effective Tax Rate</b>	0.016540482
<b>2013 Effective Tax Rate Relative to Property Values</b>	0.008270241
<b>Tax Rate Increase<sup>3</sup></b>	63.39%
<b>2013 Effective Tax Rate Relative to Property Values and Tax Rate Increase</b>	0.005242293

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Period Factor	10	9	8	7	6	5	4	3	2	1
Yearly Effect on Property Values	0.0524	0.0472	0.0419	0.0367	0.0315	0.0262	0.0210	0.0157	0.0105	0.0052
Property Value Decrease Factor	0.947577	0.952819	0.958062	0.963304	0.968546	0.973789	0.979031	0.984273	0.989515	0.994758
FTI Property Tax Revenue Forecast <sup>4</sup>	\$ 123,600,000	\$ 128,098,117	\$ 130,684,596	\$ 134,108,078	\$ 137,207,337	\$ 140,459,416	\$ 143,668,838	\$ 146,916,210	\$ 150,168,811	\$ 153,440,447
Forecasted Property Tax Revenue with Tax Increase Effect	\$ 117,120,526	\$ 122,054,367	\$ 125,203,901	\$ 129,186,842	\$ 132,891,651	\$ 136,777,769	\$ 140,656,222	\$ 144,605,677	\$ 148,594,353	\$ 152,636,067

**Sources/Notes:**

1) Fourth Amended Disclosure Statement with Respect to Fourth Amended Plan for the Adjustment of Debts of the City of Detroit Case No. 13-53846, Document 4391-2 dated May 5, 2014, page 157 of 212.

2) City of Detroit State Equalized Valuations, [http://www.detroitmi.gov/Portals/0/docs/budgetdept/2012-13%20Redbook/Charts/XX\\_State%20Equalized%20Valuations.pdf](http://www.detroitmi.gov/Portals/0/docs/budgetdept/2012-13%20Redbook/Charts/XX_State%20Equalized%20Valuations.pdf).

3) Schedule 7.0

4) Schedule 8.0

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 Schedule 7.0 - Millge Rate Increase Calculations - Flows into Schedules 3.0, 3.1, 3.2, 6.0, 6.1 and 6.2
 

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**Millage Rate Calculation**

Yearly Entertainment Expenditures <sup>1,2</sup>	Property Tax			Millage Rate
	Increase as Percent of Entertainment Expenditures	Yearly Property Tax Increase per Person	Millage Rate Increase	
\$989	15%	\$ 148.35	0.00759	
\$989	20%	\$ 197.80	0.01012	
\$989	25%	\$ 247.25	0.01265	

**Percent Increase of Tax Revenue**

	Percent Increase of Property Tax	
	Milage Rate	Revenue
Detroit Millage Rate <sup>3</sup>	0.019952	100%
15% of Entertainment	0.00759	38.03%
20% of Entertainment	0.01012	50.71%
25% of Entertainment	0.01265	63.39%

**Average Market Value**

in Detroit <sup>4</sup>	\$	39,100
Estimated Taxable Value <sup>5</sup>	\$	19,550

**Sources/Notes:**

- 1) Yearly Entertainment Expenditures is used as a proxy to measure discretionary expenditures. Yearly Entertainment Expenditures figure based on the lowest 20% of annual expenditures.
- 2) U.S. Department of Labor, Bureau of Labor Statistics, "Consumer Expenditures in 2012," Report 1046, March 2014, page 8, <http://www.bls.gov/cex/csxann12.pdf>.
- 3) Wayne County Department of Management and Budget, Assessment and Equalization Division, "2013 Apportionment and Equalization Report" p. 14.
- 4) U.S. Department of Commerce, Bureau of the Census, American Housing Survey, Selected Housing Characteristics, 2012 American Community Survey 1-Year Estimates, Detroit city, Michigan.
- 5) Taxable Value is Estimated as One half of Market Value.
- 6) The millage rate increase represents an increase to personal property tax rates. The percent increase of property tax revenue takes the incremental millage rate increase and applies it to Property Taxes as a whole.

## Schedule 8.0 - FTI Property Tax Revenue Formulation - Flows into Schedule 6.0, 6.1 and 6.2

	FY 2014 <sup>5</sup>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Property Tax Time Series Regression Forecast <sup>1</sup>	\$ 123,600,000	\$ 128,259,152	\$ 126,900,593	\$ 128,012,357	\$ 128,110,032	\$ 128,624,000	\$ 128,967,075	\$ 129,380,304	\$ 129,764,734	\$ 130,160,986
CPI Forecast <sup>2,3</sup>	123,600,000	125,577,600	127,837,997	130,139,081	132,481,584	134,866,253	137,293,845	139,765,134	142,280,907	144,841,963
Pre-Recession Based Forecast <sup>4</sup>	123,600,000	130,457,599	137,315,198	144,172,797	151,030,396	157,887,995	164,745,594	171,603,193	178,460,792	185,318,391
Average Property Tax Forecast	\$ 123,600,000	\$ 128,098,117	\$ 130,684,596	\$ 134,108,078	\$ 137,207,337	\$ 140,459,416	\$ 143,668,838	\$ 146,916,210	\$ 150,168,811	\$ 153,440,447

## Sources/Notes:

- 1) Time Series Regression forecast based on: City of Detroit Comprehensive Annual Financial Reports, Statements of Revenues, Expenditures and Changes in Fund Balance Year 1981-2012. Time Series Regression forecast is based on date from 1981-2012.
- 2) CPI Forecast takes the 2013 property tax revenue forecast from the City's Fourth Amended Disclosure of \$133,600,000 and applies the CPI estimates for the State of Michigan for 2015 (1.6%) and 2016 (1.8%) as provided by the House Fiscal Agency. The 2016 estimated CPI of 1.8% is held constant from 2016-2023.
- 3) House Fiscal Agency Economic Outlook and Revenue Estimates for Michigan FY 2013-14 through FY 2015-16, [http://www.house.michigan.gov/hfa/PDF/Revenue\\_Forecast/EconomicOutlook\\_Revenue\\_Estimates\\_Jan14.pdf](http://www.house.michigan.gov/hfa/PDF/Revenue_Forecast/EconomicOutlook_Revenue_Estimates_Jan14.pdf) and Fourth Amended Disclosure Statement with Respect to Fourth Amended Plan for the Adjustment of Debts of the City of Detroit Case No. 13-53846, dated May 5, 2014.
- 4) Pre-Recession Based Forecast assumes property tax revenue will return to its FY 2006 level by FY 2023. See Schedule 10.0.
- 5) FY 2014 forecast represets the unaudited results for the first nine months annualized based on the FY 2014 ratio of forecasted nine months total property tax revenue to the full years forecasted revenue as of July 2013. Emergency Manager Quarterly Report with Respect to the Financial Condition of the City of Detroit dated April 15, 2014, ([http://www.detroitmi.gov/Portals/0/docs/EM/Reports/EM%20Quarterly%20Update%204\\_15\\_14\\_Final%204%2015%2014\\_2.pdf](http://www.detroitmi.gov/Portals/0/docs/EM/Reports/EM%20Quarterly%20Update%204_15_14_Final%204%2015%2014_2.pdf)) and Fourth Amended Disclosure Statement with Respect to Fourth Amended Plan for the Adjustment of Debts of the City of Detroit Case No. 13-53846, dated May 5, 2014, p. 14 of 212.

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Schedule 9.0 - Tax Revenue Forecasts From the City of Detroit - Flows into Schedule 4.0, 4.1 and 4.2

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	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
<b>Property Tax City Forecasts<sup>1</sup></b>	\$ 133,600,000	\$ 114,900,000	\$ 102,600,000	\$ 99,200,000	\$ 96,800,000	\$ 94,900,000	\$ 93,100,000	\$ 90,200,000	\$ 90,100,000	\$ 90,700,000	91,300,000

**Sources/Notes:**

1) POA00706524.

Schedule 10.0 City of Detroit General Fund Tax Revenues												
	FY 1980	FY 1981	FY 1982	FY 1983	FY 1984	FY 1985	FY 1986	FY 1987	FY 1988	FY 1989	FY 1990	FY 1991
Property Tax <sup>1</sup>	\$ 112,655,936	\$ 116,020,436	\$ 120,288,130	\$ 119,618,050	\$ 116,985,862	\$ 116,737,995	\$ 112,896,088	\$ 115,533,726	\$ 118,200,532	\$ 119,876,137	\$ 118,682,602	\$ 119,879,456

**Sources/Notes:**

1) City of Detroit Comprehensive Annual Financial Reports, Statements of Revenues, Expenditures and Changes in Fund Balance Year 1981-2012.

Schedule 12.0 City of Detroit General Fund Tax Revenues												
	FY 1992	FY 1993	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Property Tax <sup>1</sup>	\$ 128,796,462	\$ 125,355,656	\$ 122,717,732	\$ 128,628,234	\$ 128,617,493	\$ 140,446,673	\$ 144,067,977	\$ 145,459,046	\$ 155,665,928	\$ 152,810,738	\$ 169,675,894	\$ 166,287,590

**Sources/Notes:**

1) City of Detroit Comprehensive Annual Financial Reports, Statements of Revenues, Expenditures and Changes in Fund Balance Year 1981-2012.

Schedule 10.0 City of Detroit General Fund Tax Revenues									
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Property Tax <sup>1</sup>	\$ 184,765,334	\$ 178,957,463	\$ 185,318,391	\$ 183,780,826	\$ 155,155,928	\$ 163,683,140	\$ 143,015,072	\$ 182,674,686	\$ 147,789,938

**Sources/Notes:**

1) City of Detroit Comprehensive Annual Financial Reports, Statements of Revenues, Expenditures and Changes in Fund Balance Year 1981-2012.

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## APPENDIX A

## Gaurav Malhotra Report

Forecast Item	Forecast Method (Include Adjustments Described in Report)	Information Not Provided
Sales and Charges for Services (Pg. 8-b)	<p>"based on historical trend" (Pg. 8-b)</p> <p>Adjustments described in report: "Adjusted primarily for the transition of the Public Lighting Department's distribution business. Remaining revenues were projected based on FY2013 levels, as adjusted to achieve targeted levels provided through discussions with department management" (Pg. 8-b)</p>	<ul style="list-style-type: none"> <li>-Provides no mathematical formulations of cited trend.</li> <li>-Provides no information on how trend was determined.</li> <li>-Provides no information on the data considered in deriving the proposed trend, such as the time period studied.</li> </ul>
Parking/Court Fines and Other Revenue (Pg. 8-c)	"reflect recent trends" (Pg. 8-c)	<ul style="list-style-type: none"> <li>-Provides no mathematical formulations of cited trend.</li> <li>-Provides no information on how trend was determined.</li> <li>-Provides no information on the data considered in deriving the proposed trend, such as the time period studied.</li> </ul>
Grant Revenue (Pg. 8-c)	<p>"Based on recent trends, as adjusted to account for recent or expected events" (Pg. 8-c)</p> <p>Adjustments described in report: "will decrease due to the transition of the Health and Wellness department and the expiration of certain public safety grants (Pg. 8-c)"</p>	<ul style="list-style-type: none"> <li>-Provides no mathematical formulations of cited trend.</li> <li>-Provides no information on how trend was determined.</li> <li>-Provides no information on the data considered in deriving the proposed trend, such as the time period studied.</li> </ul>
Licenses, Permits and Inspection Charges (Pg. 8-c)	"reflect recent trends" (Pg. 8-c)	<ul style="list-style-type: none"> <li>-Provides no mathematical formulations of cited trend.</li> <li>-Provides no information on how trend was determined.</li> <li>-Provides no information on the data considered in deriving the proposed trend, such as the time period studied.</li> </ul>
Revenue from Use of Assets (Pg. 8-c)	<p>"based on recent trends, as adjusted to account for recent or expected events" (Pg. 8-c)</p> <p>Adjustments described in report: "revenues from the use of assets include investment earnings, real estate rentals, and the sale of assets, which will include proceeds from the sale of the Veteran's Memorial Building in FY2015" (Pg. 8-c)</p>	<ul style="list-style-type: none"> <li>-Provides no mathematical formulations of cited trend.</li> <li>-Provides no information on how trend was determined.</li> <li>-Provides no information on the data considered in deriving the proposed trend, such as the time period studied.</li> </ul>
Street Fund Reimbursement (Pg. 9-d)	<p>"will decrease beginning in FY2015" (Pg. 9-d)</p> <p>Adjustments described in report:</p>	<ul style="list-style-type: none"> <li>-Provides no information on how remaining years are forecasted.</li> <li>-Provides no information on the data considered in deriving</li> </ul>

	“...due to an assumed outsourcing of solid waste operations, which will no longer reimburse GSD for maintenance costs” (Pg. 9-d)	the remaining forecasted years.
DDOT Risk Management Reimbursement (Pg. 9-d)	“based on recent trends” (Pg. 9-d)	<ul style="list-style-type: none"> <li>-Provides no mathematical formulations of cited trend.</li> <li>-Provides no information on how trend was determined.</li> <li>-Provides no information on the data considered in deriving the proposed trend, such as the time period studied.</li> </ul>
Parking and Vehicle Fund Reimbursements (Pg. 9-d)	“reflect recent trends” (Pg. 9-d)	<ul style="list-style-type: none"> <li>-Provides no mathematical formulations of cited trend.</li> <li>-Provides no information on how trend was determined.</li> <li>-Provides no information on the data considered in deriving the proposed trend, such as the time period studied.</li> </ul>
Salaries and Wages (Pg. 10-a)	“assume (i) a 10.0% wage reduction for uniformed employees beginning in FY2014 for contracts that expired in FY2013; (ii) a ramp-up of headcount to begin in FY2015 in order to return to previous staffing levels after a decline in the actual headcount for FY2014; and (iii) wage inflation rates for all employees of 5.0% in FY2015, 0.0% in FY2016, 2.5% annually from FY2017 to FY2019, and 2.0% in FY2020 and thereafter” (Pg. 10-a)	<ul style="list-style-type: none"> <li>-Provides no basis, explanation or reasoning for 10% wage reduction for uniformed employees.</li> <li>-Provides no basis, explanation or reasoning for ramp-up of headcount.</li> <li>-Provides no basis, explanation or reasoning for wage inflation.</li> </ul>
Overtime (Pg. 10-b)	<p>“reflect recent trends” (Pg. 10-b)</p> <p>Adjustments described in report: “Elimination of 12-hour shifts for police officers are projected to result in an increase in overtime costs for the Police Department” (Pg. 10-b)</p>	<ul style="list-style-type: none"> <li>-Provides no mathematical formulations of cited trend.</li> <li>-Provides no information on how trend was determined.</li> <li>-Provides no information on the data considered in deriving the proposed trend, such as the time period studied.</li> </ul>
Other Benefits (Pg. 10-c)	<p>“reflect recent trends” (Pg. 10-c)</p> <p>Adjustments described in report: “assumed bonus payments of 2.5% of salary for non-uniform employees and 3.0% of salary for uniform employees in FY2016” (Pg. 10-c)</p>	<ul style="list-style-type: none"> <li>-Provides no mathematical formulations of cited trend.</li> <li>-Provides no information on how trend was determined.</li> <li>-Provides no information on the data considered in deriving the proposed trend, such as the time period studied.</li> </ul>
Health Benefit Expenditures (Pg. 10/11-d)	<p>“Health benefit expenditures for active employees are projected based on per-head medical cost estimates provided by Milliman through FY2019 (based on the cost of plan designs being offered for 2014 enrollment)” (Pg. 10-d)</p> <p>Adjustments described in report: “Milliman projects the average annual inflation rate between FY2014 and FY2019 to be 6.8%. Medical inflation is capped (for city contribution purposes) at 4.0% after FY2019” (Pg. 11-d)</p>	<ul style="list-style-type: none"> <li>-Provides no information on how Milliman’s projections were formulated.</li> <li>-Provides no information on how Milliman’s projections were determined.</li> <li>-Provides no information on how Milliman’s projections derived.</li> <li>-Provides not explanation on how he became comfortable with Milliman’s projections.</li> </ul>

Professional and Contractual Services (Pg. 11-i)	<p>“projected to decrease beginning in FY2014...assume a 1.0% annual cost inflation beginning in FY2015” (Pg. 11-i)</p> <p>Adjustments described in report: The decrease is “due to the transition of the Health and Wellness department” (Pg. 11-i)</p>	-Provides no information on methodology or data evaluated.
Materials and Supplies (Pg. 11/12-ii)	<p>“decrease beginning in FY 2015...assume a 1.0% annual cost inflation beginning in FY2015” (Pg. 11/12-ii)</p> <p>Adjustments described in report: The decrease is “due to the transition of the Public Lighting Department distribution business” (Pg. 11/12-ii)</p>	-Provides no information on methodology or data evaluated.
Utility Expenditures (Pg. 12-iii)	<p>“reflects recent trends” (Pg. 12-iii)</p> <p>Adjustments described in report: “The projections assume the cost of electricity purchased by PLD for internal consumption will increase to account for an increase of billing to retail rates from wholesale rates beginning FY2015. The projections assume a 1.0% annual cost inflation beginning in FY2015, except for water/sewer rates, as to which the projections assume an average annual cost inflation of 3.5%” (Pg. 12-iii)</p>	-Provides no mathematical formulations of cited trends. -Provides no information on how trend was determined. -Provides no information on the data considered in deriving the proposed trend, such as the time period studied. .
Purchased Services (Pg. 12-iv)	<p>“will increase beginning in FY2014...and in FY2016...The projections assume a 1.0% annual cost inflation beginning in FY2015” (Pg. 12-iv)</p> <p>Adjustments described in report: “increase beginning in FY2014 due to increased prisoner prearrangement function costs, and in FY2016 due to additional payroll processing management.” (Pg. 12-iv)</p>	-Provides no information on methodology or data evaluated in formulating assumptions as to real volumes of service or rate of inflation in cost.
Risk Management and Insurance (Pg. 12-v)	“The projections assume a 1.0% annual cost inflation beginning in FY2015” (Pg. 12-v)	-Provides no information on methodology or data evaluated in formulating assumptions as to real volumes of service or rate of inflation in cost.
Maintenance Capital (Pg. 12-vi)	“The projections assume a 1.0% annual cost inflation beginning in FY2015” (Pg. 12-vi)	-Provides no information on methodology or data evaluated in formulating assumptions as to real volumes of service or rate of inflation in cost.

Other Expenses (Pg. 13-vii)	"The projections assume a 1.0% annual cost inflation beginning in FY2015" (Pg. 13-vii)	-Provides no information on methodology or data evaluated in formulating assumptions as to real volumes of service or rate of inflation in cost.
DDOT Subsidy (Pg. 13-ix)	"projected to increase" (Pg. 13-ix)  Adjustments described in report: "due primarily to personnel and operating cost inflation" (Pg. 13)	-Provides no information on how the projected increase was determined. -Provides no information on the data considered in deriving the proposed increase.
Exit Financing (Pg. 14-l)	"...assumed to be an 11-year note funded on October 31, 2014, with interest only payments in the first 4 years and equal principal payments made in years 5 through 11. This assumes an interest rate of 6.0%, which was provided to Mr. Malhotra by Miller Buckfire" (Pg. 14-l)	-Provides no explanation on how he became comfortable with the exit financing. -Provides no explanation on how he became comfortable with the interest rate provided by Miller Buckfire.
Contingency Reserve (Pg. 15-q)	"calculated as 1% of revenue per year throughout the forecast period" (Pg. 15-q)	-Provides no information on how contingency rate was determined. Provides no information on data considered in deriving the rate.
Income Taxes, Property Taxes, Wagering Taxes, State Revenue Sharing, and Utility Users' Taxes (Pg. 7/8-a)	"Mr. Malhotra relied on the projections made by Robert Cline and Caroline Sallee of EY's QUEST practice to forecast the City's revenues from income taxes, property taxes, wagering taxes, state revenue sharing, and utility users' taxes" (Pg. 7/8-a)	-Provides no explanation on how he became comfortable with Cline's and Sallee's projections.
Reinvestment Projections (Pgs. 9-f,13-h,14-m,15-o)	Relied on projections provided by Conway MacKenzie.	-Provides not explanation on how he became comfortable with Conway MacKenzie's projections.

## CURRICULUM VITAE

# Glenn D. Meyers, Ph.D.

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## FTI Consulting

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## Education

Ph.D. in Economics,  
with Honors, Columbia  
University (Herbert H.  
Lehman Fellow)

B.A. in Economics, *cum  
laude*, Columbia College

## Professional Affiliations

American Economic  
Association

Dr. Meyers is a Managing Director in the FTI Consulting Forensic and Litigation Consulting practice and is based in New York. He specializes in the application of economic, financial and statistical analysis to issues arising in commercial disputes, regulatory policy formulation and enforcement, and corporate strategic planning. He has authored studies, advised governments, and submitted expert testimony in federal court, state and county courts, arbitration and regulatory proceedings, and before the U.S. Senate. In a wide range of disputes relating to securities, intellectual property, antitrust, international trade, and general contract law, he has provided economic and related analyses addressing both liability and damages. With respect to corporate planning, he has advised companies on economic aspects of mergers and acquisitions, regulatory compliance, overseas investment, and human resource development. Industries studied in depth include energy, financial services, manufacturing, chemicals and pharmaceuticals, transportation and distribution, construction, telecommunications, electronics, and agriculture.

Dr. Meyers received his Ph.D. in economics, with Honors, at Columbia University, where he was a Herbert H. Lehman Fellow (concentration in the subjects of Industrial Organization and International Trade and Finance). He received his B.A. degree in economics, *cum laude*, at Columbia College. He has served on the adjunct faculties of Columbia University and Fordham University School of Law, and is a member of the American Economic Association.

## Selected Clients

International Securities Exchange	Nasdaq
Allianz Insurance Company	JP Morgan Chase & Co.
Citibank, N.A.	HSBC Bank USA, N.A.
BMO Bank of Montreal	Macquarie Group
Banco Popular de Puerto Rico	Brookfield Asset Management
New York Mercantile Exchange	ITT-Grinnell Corporation
EI Paso Corporation	Electricite de France
General Chemical Corp.	Public Service Enterprise Group
Peabody Energy Corporation	Commonwealth Edison
General Electric Company	Edison Mission Energy
Westinghouse Electric Co.	Exxon Mobil Corp.
Chevron Corp.	Royal Dutch/Shell Group
Tenneco, Inc.	LyondellBassel Industries
GAF Corporation	Airbus, S.A.S.
Honeywell International	Colt's Manufacturing Co., Inc.
Armstrong World Industries	Johnson & Johnson
Proctor & Gamble Company	Hitachi Corporation
Canon U.S.A., Inc.	PepsiCo, Inc.

Dow Chemical Company	AT&T Corp.
Sprint Nextel Corp.	Brasil Telecom, S.A.
B.F. Goodrich Company	Black and Decker Corp.
The Seagram Company, Ltd.	U.S. Business Roundtable
U.S. Chamber of Commerce	Government of Japan
Republic of Turkey	State of Israel
Commonwealth of Puerto Rico	State of Illinois
State of New Jersey	District of Columbia

## Representative Engagements

### Government Advisory

- Directed the work of consultancy teams from Deloitte & Touche LLP, Duke Energy and the law firm of Dickstein, Shapiro, in the **reform of energy markets in Turkey**. Assisted the Turkish government in the drafting of legislation for the restructure and privatization of electricity and natural gas markets, including the development of energy trading, transport and taxation policies; designed regulatory authorities for both markets; prepared a major study of the structure and operation of a liberalized natural gas market; and performed valuations of four of the country's primary electric generating facilities.
- Advised the **Government of Israel** on the **restructure and privatization of that country's electricity industry**. This assignment entailed selection of an optimal model for the market, including energy trading institutions and protocols and terms and conditions for IPPs, and formulation of strategies for adoption of the market model, including possible unbundling and privatization of the Israel Electric Corporation.
- New Jersey Board of Regulatory Commissioners: 1974-1994, Various Dockets.** For the Department of the Public Advocate, conducted historical and forward-looking analyses of Public Service Electric & Gas, Atlantic City Electric, and Verizon costs of service, including the evaluation of cost allocations, productivity trends, proposed rate adjustment clauses, employee compensation , and workforce size and structure.
- Reports of the Neutral Fact-Finder on the Determination of Market Values for Electric Power and Energy, State of Illinois, 1998, 1999, and 2000.** As an advisor to the State of Illinois, calculated competitive prices for electricity in that State, as the market transitioned to a fully competitive one. Entailed analysis of millions of hourly prices under highly complex forward supply contracts, to identify key terms and conditions of delivery impacting price
- As advisor to Commonwealth of Puerto Rico (CPR), conducted **financial/economic analyses of the acquisition and subsequent divestiture of vessels and equipment used in trade between Puerto Rico and the U.S. mainland**, including valuation of the merchant shipping fleet at issue.
- As advisor to the Governor's Committee on Labor Policy, CPR, **analyzed the employment effects of privatization** of government enterprises; devised appropriate transition strategies; and developed measures to enhance the international competitiveness of Puerto Rico's labor force by addressing institutional factors impeding productivity growth.



- As advisor to the Department of Agriculture, CPR, **assessed the competitiveness of Puerto Rico's agricultural exports**, and formulated more effective marketing strategies at both the wholesale and retail levels. Study also addressed potential impact of agricultural exports on the Island's economic development.
- ***City of Newark, Newark Housing Authority, and Newark Board of Education: Study to Determine the Extent of Discrimination in Government Procurement against Women- and Minority-Owned Businesses (1995)***. Evaluated statistical evidence of discrimination, as required by law to establish the propriety of set-aside programs for women- and minority-owned vendors, and cost implications of affirmative action policies.
- ***Master plan for port development over twenty years***, including assessment of historical and potential future merchandise and commodity traffic volume, evolving configuration of key trade routes, actual and potential port revenue and return on investment, and investment alternatives. *Client: Port of Galveston, Texas.*

### Energy Sector Disputes

- ***Critical evaluation of alleged negative economic impacts of proposed merchant power plants.*** Rebutted arguments by incumbent electricity suppliers that generation facilities built by new market entrants would have material adverse effects on regional economies as a result of related air pollution and other environmental impacts. *Client: Peabody Energy Corp.*
- ***Petroleo Brasiliero S. A. – Petrobras v. El Paso Rio Claro LTDA et al***, International Centre for Dispute Resolution Case No. 50T1980008605. Evaluation for plaintiff's law firm of the causes of unstable electricity prices in Southeastern Brazil and the impact of those prices on the profitability of a merchant power facility. *Client: Clyde & Company (U.K.).*
- ***Habibullah Coastal Power (Private) Power Company v. Fiat Avio, S.P.A.***, Arbitration before the United Nations Commission on International Trade Law. Critical analysis of testimony presented by Fiat seeking retroactive award of deferred charges for the construction of an electric generating plant in Pakistan. *Client: El Paso Corp.*
- ***Illinois Commerce Commission: Docket No. 86-0249***: Evaluated the effects of future electric rate increases required to cover the cost of a nuclear power facility on the projected financial performance of that facility, and related assumptions concerning the sensitivity of the demand for electricity to electric service rates. *Client: Commonwealth Edison.*
- ***Impacts on credit risk and derivative contract values of fraudulent accounting practices ascribed to a major energy company.*** For one of the country's largest utilities, assessed the effect of improper accounting practices on the counterparty's financial condition and credit standing, and the market value of its trading contracts. *Client confidential.*
- ***Analysis of regulatory policy and internal controls governing the electric energy and transmission contract trading activities of a global petroleum company.*** Assessed the impact of changes in energy and transmission market design on the performance of the client's energy trading desk. *Client Confidential.*
- ***MacQuarie Terminal Holdings LLC versus Voting Trust of IMTT Holdings, Inc.***, International Center for Dispute Resolution File No. 50 125 T 0025 11 (2011). Assessment of the financial condition and prospects of a major bulk liquid storage provider serving the petroleum and petrochemical industries primarily, in relation to a dispute between stockholders as to the appropriate allocation of net earnings.

- ***LyondellBasell Industries N.V. versus Allianz Global Risks US Insurance Company et al*** (2012). Critical assessment of respondents' assumptions as to the impact of Hurricane Ike (2008) on the prices of crude oil and refined products, and the claimant's volume of business in petrochemicals.
- ***Tenneco, Inc. Acting by and through its Division, Tennessee Gas Pipeline Company versus J. Ray McDermott & Company, et al.***, S.D. Texas, 1979. Co-authored study of bidding practices for the laying of undersea pipeline, as part of an assessment of antitrust liability.
- ***General Atomic versus Ranchers HNG***, D. New Mexico, 1976, Case No. 2-76-00598 (part of the litigation collectively known as the "Worldwide Uranium Cartel Case.") Evaluated economic issues related to antitrust liability in the marketing of uranium. Included detailed assessment of events underlying major uranium price movements.

#### *Related Publications*

- **"Stranded Utilities: How Demographics, Not Management, Caused High Costs and Rates"** (with B. Wallingford, II and H. DePodwin), 135 *Public Utilities Fortnightly* 11 (1997). Study determining that most of the interstate variation in electricity prices is due to differences in customer density, regional construction costs, and use of nuclear power.
- **"Electric Utility Stranded Costs and Nuclear Responsibilities"** (with Horace J. DePodwin), *Proceedings of the EUC Conference on Stranded Cost Determination and Securitization*, Denver, Colorado, December 1997. Analyzed the effects of financial pressures on nuclear plant maintenance, compromised management of radioactive material, and possible remedies.
- **"Economic Theory and Application in Utility Ratemaking,"** 117 *Public Utilities Fortnightly* 13 (1986). This article explored the benefits and drawbacks of the use of partial and total factor productivity growth projections as a basis for adjustments to utility revenue requirements under rate base regulation, and measurement of elasticity of demand for utility services.

#### **Antitrust Liability and Damages**

- ***Boeing/McDonnell-Douglas Merger***. Prepared brief submitted by Airbus Industrie to the Federal Trade Commission and the European Union on the competitive impact of the merger and related marketing strategies adopted by Boeing, such as long-term, single-source contracts. Analysis resulted in the discontinuance of such contracts.
- ***United States v. Christopher Cartwright et al***, U.S. District Court for the District of Maryland, Case No. WMN 07-0570, 2008. In the sentencing phase of this proceeding, testified on economic damages to the Department of Defense and a competing government contractor arising from a defendant's use of inside information in developing his bids. Testimony resulted in the Court's rejection of virtually all damages claimed by the DOJ.
- ***Ticket Center, Inc. et al v. Banco Popular de Puerto Rico, U.S. District Court for the District of Puerto Rico, Civil Case No. 04-2062 (GAG-BJM), 2008***. In behalf of defendant, determined appropriate definitions of the relevant product and geographic markets for theatrical, sports, and other event-ticket products, advertising services, and electronic transactions, and assessed the extent of competition in each of those markets.
- ***Midwest Engineering Services, Inc. et al v. International Union of Operating Engineers, Local 150, AFL-CIO et al***, U.S. District Court for the Northern Division of Illinois, Western

Division, Case No. 05 C 50023: Analysis of antitrust liability and damages to plaintiffs arising from the foreclosure of the Chicago-area market for geotechnical testing services.

- ***Cool Wind Ventilation Corp. v. Sheet Metal Workers International Association, Local Union No. 28, et al.***, U.S. District Court for the Eastern District of New York: Evaluated antitrust liability and damages to plaintiff resulting from alleged anticompetitive activities by the New York City/Long Island local sheet metal workers' union and affiliated contractors.
- ***Johnson Development Group, Inc., et al. v. Carpenters Local Union No. 1578***, D. New Jersey, Case No. 89-566: Testified on the economic causes and effects and antitrust implications of a boycott of homebuilders by suppliers of concrete during a labor dispute.
- ***Honeywell International, Inc. et al v. Universal Avionics Systems Corp. et al***, U.S. District Court for the District of Delaware, C.A. No. 03-242-MPT. Critical assessment of alleged relevant markets for aircraft guidance systems, focusing on the economic validity of market definition based of varying system terrain detection capabilities.
- ***Elliot Fineman: The Industry Network System, Inc. v. Armstrong World Industries, Inc.***, U.S. District Court for the District of New Jersey, Civil Action No. 84-03837: Co-authored studies on relevant market and damages in relation to claims that Armstrong sought to exclude plaintiff from the "market for video magazines for floor covering retailers."
- ***Barry Wright Corporation v. Pacific Scientific Company***, 555 F. Supp. 1264 (D. Massachusetts, 1983). In behalf of defendant, co-authored study of economic aspects of antitrust liability in the sale of shock suppressors for nuclear power plants.
- ***Tenneco, Inc. Acting by and through its Division, Tennessee Gas Pipeline Company v. J. Ray McDermott & Company, et al.***, S.D. Texas, 1979. Co-authored study of bidding practices for the laying of undersea pipeline, as part of an assessment of antitrust liability.
- ***General Atomic v. Ranchers HNG***, D. New Mexico, 1976, Case No. 2-76-00598 (part of the litigation collectively known as the "Worldwide Uranium Cartel Case.") Evaluated economic issues related to antitrust liability in the marketing of uranium. Included detailed assessment of events underlying major uranium price movements.

#### **Securities Valuation and Trading**

(Also see Intellectual Property Cases)

- ***International Securities Exchange LLC v. Chicago Board Options Exchange, Inc.***, U.S. District Court for the Southern District of New York, Civil Action No. 06-cv-13445. In behalf of plaintiff, assessing the impact of patented electronic trading technology on options exchange order flow. Entails detailed study of the evolving structure of the options market.
- ***Pension Committee of the University of Montreal et al. v. Banc of America Securities LLC et al.***, U.S. District Court for the Southern District of New York, Civil Action No. 06-cv-13445. In behalf of defendant Citco Fund Services, evaluated plaintiffs' due diligence in relation to their investments in four commonly-controlled hedge funds found to be fraudulent.
- ***In re Lehman Brothers Holdings Inc. et al.***, United States Bankruptcy Court for the Southern District of New York, Chapter 11 Case No. 08-13555 (JMP) (2010-11). Development of alternative measures of losses to Lehman stockholders resulting from the bank's disputed "Repo 105" transactions.

- **Silvercreek Management, Inc. et al v. Law Offices of Cotchett, Pitre & McCarthy,** Arbitration before Judicial Arbitration and Mediation services, Inc., New York Office. Assessment of the adequacy of contemporaneous information on the risks associated with Enron securities in the context of a claim of professional negligence.
- **Evaluation of the economic basis and financial impacts of floating rate debenture and interest rate swap transactions** jointly valued at over a billion dollars, from the standpoint of both parties to these transactions. Entailed an analysis of the related operations of one of the world's largest insurers and a major global holding company. *Client confidential.*
- **Assessment of the business purposes and market value of a very sizeable portfolio of foreign exchange forward and option contracts**, in behalf of a consortium of banks contemplating a role in the restructure of a major hedge fund. *Clients confidential.*
- **ORS Recovery, Inc. et al v. One Group International, Inc. et al**, U.S. District Court for the Southern District of New York. Development of a methodology for determining the losses incurred by the victims of a complex international Internet Ponzi scheme entailing fraudulent internet currency accounts and investment offerings. Work undertaken for plaintiffs.
- **EPIC private mortgage insurance litigation**, M.D.L. No. 680 (1988). Co-authored economic study and related financial analysis of the impact of cyclical market factors on the value of the residential properties upon which the mortgage-backed securities at issue were based. This dispute in key respects foreshadowed those arising in the "sub-prime mortgage crisis."
- **Modeling of the financial performance of a real estate investment trust and related trust share values** under varying assumptions as to underlying property values and property valuation methods, undertaken in behalf of the former board overseeing the trust.

#### Intellectual Property Law

- **British Telecommunications plc et al versus Haier Trading, L.L.C. et al**, United States District Court for the Southern District of New York, Civil Action No. 09-CV 7114 (WGY)(2011). Estimation of economic damages to plaintiffs resulting from defendants' alleged infringement of MPEG video and audio coding technology their sales of televisions.
- **Gucci America, Inc. versus Guess?, Inc. et al**, United States District Court for the Southern District of New York, Civil Action No. 09-cv4373 (SAS) (2011-12). Estimation of economic damages to plaintiff resulting from defendant's use of plaintiff's designs in shoes, handbags, and other fashion accessories.
- **Tarkus Imaging, Inc. versus Adobe Systems, Inc. et al**, United States District Court for the District of Delaware New York, Civil Action No. 10-063-LPS (2011-12). Evaluation of plaintiff's claim of lost profit due to defendants' alleged infringement of image correction technology.
- **LML Patent Corp. v. JP Morgan Chase & Co. et al**, E.D. Texas, Marshall Division, 2011. Determination of a reasonable royalty for software utilized in electronic payment processing. Entailed analysis of related settlement agreements and trends in transaction methods.
- **Realtime Data LLC v. CME Group Inc., et al**, E.D. Texas, Tyler division, 2011. Determination of a reasonable royalty for software utilized in the compression and decompression of securities market data, entailing assessment of alternatives and economic impacts.

- ***Johnson & Johnson Vision Care, Inc. v. Ciba Vision Corporation***, S.D. New York, 2005. Critically assessed defendant expert's use of the Bass product diffusion model and related statistical analyses to determine the impact on plaintiff's sales of defendant's alleged false claims regarding the performance of its contact lenses.
- ***Technology Research Corporation v. Tower Manufacturing Corp. and Fedders Corp.***, M.D. Florida, Tampa D., 2006. Evaluated conclusions of plaintiff's expert regarding plaintiff's hypothetical prices and profits absent alleged infringement, in respect to the air conditioner components at issue in this case.
- ***Fuji Hunt Photographic Chemicals, Inc. v. Kelstar International Enterprises Inc. et al***, Superior Court of New Jersey, 2003. Determined economic damages to Fuji Hunt as a result of theft of trade secrets for lithographic chemical formulations, based in part on estimation of plaintiff's past and future sales and profits absent defendant's alleged illegal conduct.
- ***Colt's Manufacturing Company v. the United States Department of Defense, and Certain Defense Industry Manufacturers***. Assessed damages to Colt's resulting from lapses in the enforcement of trade secret provisions in its agreements with the Department of Defense.
- ***Ole K. Nilssen v. Motorola, Inc. and Motorola Lighting, Inc.***, N.D. Illinois, E.D., 1997. Study on liability and damages related to theft of trade secrets for electronic lighting products. Evaluated relevant product market, projected cash flows, applicable product life cycles, and other factors influencing projected commercial success. Work undertaken for plaintiff.
- ***Becton, Dickinson and Company v. Critikon, Inc.*** [subsidiary of Johnson & Johnson], Arbitration No. 13 133 00388 93, 1995. Critically evaluated plaintiff's claims regarding damages due to alleged infringement of patents for medical devices. Entailed assessment of commercial viability and contributions to profit of several interrelated innovations.
- ***Goodyear Aerospace Corporation v. The B.F. Goodrich Company***, S.D. Ohio, 1985. Contributed to study on commercial success and value of patents for aircraft brakes, based in part on actual and projected mix of aircraft types worldwide.

#### Labor Disputes

- ***New York City Police Sergeant's Benevolent Association Interest Arbitration, 2005:*** Evaluated the capacity of the government of the City of New York to finance requested pay increases; the value of settlements with other municipal bargaining units; productivity and compensation trends for police sergeants; and other factors bearing on the arbitration. Financing capacity assessed in collaboration with former City budget director.
- ***Nassau County (New York) Policemen's Benevolent Association Interest Arbitration, 2003-4:*** Evaluated the compensation of county police relative to benchmark bargaining units and aggregative labor cost indices, alternative definitions of the relevant labor market, and county budget impacts. .
- ***EEOC v. O&G Spring & Wire Forms Specialty Company***, 38 F.3d (7<sup>th</sup> Cir. 1994). Testified in behalf of defendant in regard to claims of age and race discrimination. Entailed evaluation of statistical evidence of discrimination and analysis of the employee recruitment process.
- ***United States District Courts for the Eastern District of Michigan and the District of Hawaii***: For the Chamber of Commerce of the United States, assessed the impact of the payment unemployment compensation to strikers on the collective bargaining process.

- ***Multi-Industry, Multi-Country Evaluation of Restrictive Work Practices:*** Undertaken for the Business Roundtable of the United States, this study evaluated the operations of the basic steel, residential and industrial construction, automobile, heavy electrical equipment, and pharmaceutical industries of the United States, France, Japan and Puerto Rico.

#### Contract Disputes and Torts, General

- ***SR International Business Insurance Co., Ltd. V. World Trade Center Properties LLC et al and World Trade Center Properties LLC et al v. Allianz Insurance Company et al,*** United States District Court for the Southern District of New York, Case No. 01 Civ. 12738 (JSM). Valuation of the World Trade Center for purposes of resolving 9/11-related insurance claims (content of work confidential). *Clients: respondent insurers.*
- ***Assessment of several potential multi-billion-dollar damages claims arising out of the bankruptcy of one of the world's largest auto parts manufacturers.*** This multi-year engagement entailed systematic analysis of the viability of the Company's initial business model given evolving market structure, industry-wide cost trends, contractual relationships with key customers, collective bargaining history and anticipated future outcomes, and other factors. *Client confidential.*
- ***Yosef Yariv et al v. AT&T Corp. and Sam's Club (Division of Wal-Mart Stores),*** Superior Court of New Jersey, Docket No. SOM-L-272-05, 2005. Analyses of class certification issues, economic assumptions underlying plaintiffs' liability claims, and potential damages in this class action suit alleging fraud in the marketing of prepaid calling cards. *Client: AT&T Corp.*
- ***Estimation of economic damages to Brasil Telecom S.A. (BrT) as a result of alleged unlawful conduct of minority owner Telecom Italia Group.*** Analysis of the impact of alleged misconduct on the market value of BrT stock; the timing of the Company's entry into markets for cellular service, and related foregone earnings; the terms and conditions of recent BrT acquisitions; and other determinants of BrT's market value. *Client: Brasil Telecom S.A.*
- ***Forensic accounting investigation and valuation of a major mobile virtual network operator and electronic transactions systems developer,*** entailing among other things analysis of all product and service markets potentially at issue and the subject firm's activities in those markets. *Client: Sprint Nextel Corp.*
- ***Pepsi-Cola Bottling Company of Pittsburg, Inc. v. Bottling Group LLC,*** U.S. District Court for the District of Kansas, Case No. 07-2315 JAR, 2008. In behalf of defendant, Pepsi Bottling Group, Inc., evaluated plaintiff distributor's claims of economic injury, including diminution of goodwill, arising from alleged breaches in a settlement agreement governing defendant's wholesale and retail marketing practices in plaintiff's franchise territory.
- ***Black Millwork Company, Inc., v. Andersen Windows, Inc.,*** U.S. District Court for the District of New Jersey, Civil Action No. 08-cv-00461, 2008. In behalf of defendant, Andersen Windows, Inc., evaluated plaintiff's performance as an Andersen distributor and the economic basis for Andersen's evolving product distribution strategy nationwide.

#### International Trade (Exc. Energy Sector)

- ***Investigation of the costs and export marketing practices of the Mexican winter vegetable industry, and their impact on market shares and prices in the United States.*** Resulting study served as basis for testimony before the Sub-Committee on Agriculture,

Nutrition and Forestry of the United States Senate, and led to modification of trade policy in regard to these products. *Clients: Various Florida growers' associations.*

- ***Investigations of the costs and export marketing practices of manufacturers of ceramic tile in Japan, Korea and the Philippines.*** Included preparation of testimony in antidumping proceedings before the United States International Trade Commission, and collaboration with staff of the Ministry of Trade and Industry of the Government of Japan, in enforcing a program of voluntary export restraints. *Client: Ceramic Tile Manufacturers of the United States.*
- ***Investigation of the costs, prices, and export marketing practices of British, French, German and Swiss of manufacturers of heavy electrical equipment.*** Preparation of several major reports and expert testimony for Congressional and USITC proceedings, involving extensive analysis of the behavior of prices and the relation of prices to costs and market shares. *Clients: General Electric Company and Westinghouse Electric Corporation.*
- As advisor to the Ministry of Trade and Industry of the Government of Japan, performed comprehensive ***comparative study of product distribution systems in the United States and Japan,*** including recommendations for the streamlining of distribution in Japan to reduce trade barriers and lower costs to consumers.
- ***Economic feasibility studies for Port Carteret (New Jersey)*** – one of largest product distribution centers in the United States – as well as adjacent docks and marinas and other commercial facilities. Entailed assessment of the economic and commercial impacts of extensive ground soil contamination and related water pollution. *Client: Amax Corporation.*

## Employment History

Managing Director, FTI Consulting, 2005- Present

Director, Forensic and Litigation Consulting, FTI Consulting, 2003-2004

Pursuant to Acquisition of KPMG Forensic

Director, Forensic, Litigation & Regulatory Group, KPMG, 2002

Director, Dispute Consulting, Deloitte & Touche (D&T), 2001-2002

Project Director, Energy Group, D&T, 1998-2001

Senior Manager, Economic Services, D&T, 1998-2001

Principal, Economic Studies, 1992-1998

Various Positions, Economic Studies, 1972-1992



## Prior Testimony and Publications

**DR. MEYERS' TESTIMONY, POST-2009**

1. ***British Telecommunications plc et al versus Haier Trading, L.L.C. et al***, U.S. District Court for the Southern District of New York, Civil Action No. 09-CV 7114 (WGY)(2011). Deposition testimony.
2. ***Nature's Plus Nordic A/S and Dermagruppen A/S versus Natural Organics, Inc., House of Nature A/S, Hans Kare Lunestedt, and Organic House A/S***, U.S. District Court for the Eastern District of New York, Case No. 09-CV-4256. Deposition testimony.

**DR. MEYERS' PUBLICATIONS, POST-2003**

**None. Others provided in curriculum vita.**

# **EXHIBIT 3**

UNITED STATES BANKRUPTCY COURT  
EASTERN DISTRICT OF MICHIGAN  
SOUTHERN DIVISION

3 In re:

4 CITY OF DETROIT, MICHIGAN,

5 Debtor. Chapter 9

6 Case No. 13-53846

9 VIDEOTAPED DEPOSITION OF GLENN MEYERS,

10 taken by Respective Parties, pursuant to Notice, at  
11 the offices of Jones Day, 222 East 41 Street, New  
12 York, New York, on Friday, August 1, 2014,  
13 commencing at 8:59 a.m., before Chandra D. Brown, a  
14 Registered Professional Reporter and Notary Public  
15 within and for the State of New York.

000

25      JOB NO.: 215748

	Page 2	Page 4
1 A P P E A R A N C E S :		
2		1 THE VIDEOGRAPHER: We are going on the
3 JONES DAY		2 record. The time is 8:59 a.m. on August 1,
4 Attorneys for CITY OF DETROIT		3 2014.
5 222 East 41st Street		4 This is the videotaped deposition of
6 New York, NY 10017		5 Mr. Glenn Meyers, in Re: City of Detroit,
7 By: GEOFFREY S. STEWART, ESQ.		6 Michigan under the jurisdiction of the United
8 CHRISTOPHER DIPOMPEO, ESQ.		7 States Bankruptcy Court, East District of
9 SARAH A. HUNGER, ESQ.		8 Michigan, Southern Division, Case No. 13-53846.
10 KIRKLAND & ELLIS LLP		9 This deposition is being held at Jones
11 Attorneys for SYNCORA GUARANTEE, INC.		10 Day, 222 East 41st Street, New York, New York.
12 and SYNCORA CAPITAL ASSURANCE, INC.		11 My name is Salleanne Brown and I'm the
13 300 North LaSalle Street		12 video specialist. The Court Reporter today is
14 Chicago, IL 60654		13 Chandra Brown. We are from Litigation
15 By: DOUGLAS G. SMITH, ESQ.		14 Services.
16 DENTONS US LLP		15 May I have an introduction from counsel?
17 Attorneys for OFFICIAL COMMITTEE OF		16 MR. STEWART: Geoffrey Stewart, Chris
18 RETIREES		17 DiPompeo and Sarah Hunger of Jones Day for the
19 1221 Avenue of the Americas		18 City of Detroit.
20 New York, NY 10020		19 MR. SMITH: Doug Smith for Syncora.
21 By: ANTHONY B. ULLMAN, ESQ.		20 MR. ULLMAN: Anthony Ullman for Dentons
22 CHADBOURNE & PARKE LLP		21 for the Retiree Committee.
23 Attorneys for ASSURED GUARANTY		22 MS. TRIPATHI: Aparajita from Greenhill
24 MUNICIPAL CORPORATION		23 for The General Retirement System and the
25 1200 New Hampshire Avenue, N.W.		24 Police and Fire Retirement System.
Washington, DC 20036		25 MR. STEWART: And on the phone?
By: LATA NOTT, ESQ.		
(Via Telephone)		
22 ALSO PRESENT:		
23 Aparajita Tripathi, Greenhill & Co.		
24		
25		
	Page 3	Page 5
1 I N D E X		
2 WITNESS	PAGE	1 MS. NOTT: Lata Nott from Chadbourne &
3 GLENN MEYERS		2 Parke on behalf of Assured Guaranty.
4 EXAMINATION BY		3 THE VIDEOGRAPHER: Will the Court Reporter
5 MR. STEWART	5, 209	4 please swear in the witness.
6 MR. SMITH	208	5 G L E N N M E Y E R S, called as a witness, having
7 MR. ULLMAN	211	6 been first duly sworn by a Notary Public of the
8 ooo		7 State of New York, was examined and testified
9 E X H I B I T S		8 as follows:
10 MEYERS	DESCRIPTION	9 EXAMINATION BY
11 EXHIBIT 1	Expert Report of	10 MR. STEWART:
	Dr. Glenn Meyers,	11 Q Good morning, Mr. Meyers. I'm Geoffrey
	dated July 25, 2014	12 Stewart of Jones Day. Nice to meet you.
13 EXHIBIT 2	Document re:	13 You've given depositions before, I assume.
	Case-Schiller Index	14 A Yes.
14 EXHIBIT 3	Document entitled	15 Q Have you ever testified in trials before?
	Consumer Price Index,	16 A Yes.
	Detroit, Ann Arbor,	17 Q How many times?
	Flint, June 2013	18 A Gosh. Half a dozen, perhaps.
18		19 Q Okay. If you have any trouble with my
19		20 question, just tell me and I will ask you a new
20		21 one.
21		22 Just for the record, I need some of your
22		23 personal information.
23		24 What is your business address?
24		25 A It's Three Times Square, 9th Floor.
25		

	Page 6	Page 8
1	Q Okay. Here in New York City?	1 as in the previous question, correct?
2	A Oh, yes.	2 Q Correct.
3	Q Okay. And who do you work for?	3 A No. But here again, I have done that as a
4	A FTI Consulting, Incorporated.	4 retained expert.
5	Q And how long have you worked for them?	5 Q And have you ever been retained -- I am
6	A Since 2003.	6 going to ask this in two parts; one employed
7	(Whereupon, the aforementioned Expert	7 and the other retained, just so I don't ask
8	Report of Dr. Glenn Meyers, dated July 25,	8 confusing questions.
9	2014, was marked as Meyers Exhibit 1 for	9 A That's fine.
10	identification as of this date by the	10 Q Have you ever been employed in a job
11	reporter.)	11 requiring you to forecast tax revenues?
12	BY MR. STEWART:	12 MR. SMITH: Objection. Form.
13	Q I'm going to put before you Exhibit 1.	13 A It strikes me a -- a bit ambiguous just
14	Is that the report you prepared in this	14 for this reason, if acting as a consultant, I
15	case?	15 have the obligation of doing that, then in at
16	A I believe so, yes.	16 least one sense I'm being employed in order to
17	Q And attached to it is a curriculum vitae,	17 do that. That's the sort of thing -- I am
18	correct?	18 employed by FTI to do as the occasion may
19	A Yes.	19 warrant it.
20	Q Is that an accurate summary of your	20 Q I see. Has a government ever employed you
21	education and work history?	21 directly to perform tax revenue forecasting for
22	A I believe so, yes.	22 them?
23	Q You were hired as an expert in this case?	23 A I have done tax revenue forecasting, not
24	A Yes, I was.	24 as an employee of government, but as a
25	Q To offer opinions about what?	25 consultant to government.
	Page 7	Page 9
1	A As indicated in my report, to evaluate	1 Q And what are some of the engagements that
2	potential tax increases and other tax measures	2 you had where you were asked to do tax revenue
3	as it might increase the City's revenue, and to	3 forecasting?
4	evaluate the City's tax forecast, in particular	4 A Well, in no particular order, in my work
5	its property tax forecast.	5 advising the Government of Turkey on the
6	Q Okay. You're being paid at the rates that	6 development of its energy sector. I, among
7	are set forth in your report?	7 many other things, evaluated potential tax
8	A Yes.	8 measures in the energy sector from the
9	Q There is no contingency tied to that?	9 standpoint of their impact on economic
10	A None.	10 efficiency and the burdens that might be
11	Q And you have a Ph.D. in economics?	11 associated with them on particular stakeholders
12	A Yes.	12 in an industry, incidents and so forth.
13	Q Have you ever worked for a government?	13 Impacts on carbon consumption and use and that
14	A Yes.	14 kind of thing.
15	Q When did you do that?	15 I did some work for the Government of the
16	A Oh, my. Several instances.	16 Commonwealth of Puerto Rico, evaluating tax
17	Q I meant being employed, not being	17 evasion there for so-called underground economy
18	retained. I'm sorry.	18 and likely associated losses in revenue to the
19	A Oh, employed? I'm sorry. I'm sorry.	19 Government as a consequence of that, and what
20	I have never been employed by a	20 might be done to mitigate that kind of
21	government, no, but I have been retained often	21 behavior.
22	by governments to do several kinds of analyses.	22 We are on the subject of taxes still?
23	Q Okay. Have you ever, in your career, been	23 Q Correct. Tax revenue forecasting.
24	employed to perform budget analyses?	24 A Indeed. Indeed. Understood.
25	A You're using "employed" in the same sense	25 In my work for the Police Sergeant's

<p style="text-align: right;">Page 10</p> <p>1 Benevolent Association here in New York City, I      2 evaluated the City's budget forecast, revenue      3 forecast and so on, in relation to the issue of      4 ability to pay wage and other compensation      5 increases. I did that working with -- in      6 collaboration with Abe Blackman, the former      7 budget director for the City under Giuliani.      8 Let me think, if I may. I'm not sure      9 that's comprehensive, but those are, at any      10 rate, indications of what I've done along those      11 lines.</p> <p>12 Q Do you remember any engagement you had      13 where you were asked to forecast property tax      14 revenues?</p> <p>15 A Well, there was, of course, a component of      16 that in my work in relation to New York City      17 forecasts. As I'm sure you know, property      18 taxes constitute an important source of revenue      19 for the City.</p> <p>20 Q Okay. Any others?</p> <p>21 A Oh, yes. In addition, I did work of the      22 same kind, albeit on a smaller scale, for      23 Nassau County out on Long Island.</p> <p>24 Again, the issue was the ability of the      25 County to pay its police and related budget</p>	<p style="text-align: right;">Page 12</p> <p>1 Hayes, H-A-Y-E-S; Daniel Delorenzo,      2 D-E-L-O-R-E-N-Z-O; Alisa Knapp, K-N-A-P-P; Dawn      3 Hall.</p> <p>4 Let me see who else might have been      5 involved here. Julianna Saitz, S-A-I-T-Z.</p> <p>6 Marginal contributions by others whose      7 names I don't recall at the moment.</p> <p>8 Q Okay. Was there somebody who was your      9 right-hand person on this?</p> <p>10 A I would say Mr. Delorenzo.</p> <p>11 Q How many hours, if you know, or if you can      12 estimate for me, did FTI or has FTI spent on      13 the Project Murder City to date?</p> <p>14 A Well, first let me distinguish. The      15 project referred to as Murder City includes      16 other sorts of work that FTI has done in      17 relation to the bankruptcy.</p> <p>18 Q I see.</p> <p>19 A And my component, which is what I assume      20 you are interested in?</p> <p>21 Q It is.</p> <p>22 A I would estimate, oh, goodness, let's      23 see -- this would be -- this is a very, very      24 rough estimate, but I would say probably      25 something -- somewhere between a thousand and</p>
<p style="text-align: right;">Page 11</p> <p>1 issues and forecasts and, of course, property      2 taxes, as we know, are a significant component      3 of County revenue, as well.</p> <p>4 Q Okay. Anything else?</p> <p>5 A Not that comes to mind at the moment.</p> <p>6 Q Okay. Now, pardon me, do you consider      7 yourself an expert in forecasting property tax      8 revenues?</p> <p>9 A I consider myself as having expertise of      10 substantial relevance to that, yes.</p> <p>11 Q Now, let me ask you about your work on      12 this case.</p> <p>13 First of all, did the project have any      14 special name like Project Otto or any of those      15 names like you sometimes see?</p> <p>16 A Murder City, I believe.</p> <p>17 Q Really?</p> <p>18 A Yeah.</p> <p>19 Q Okay. So I'm going to refer to it as      20 Project Murder City so we don't have any      21 ambiguity here.</p> <p>22 You were part of a team of people?</p> <p>23 A Yes.</p> <p>24 Q Who else was on the team?</p> <p>25 A Well, again, in no particular order, Dana</p>	<p style="text-align: right;">Page 13</p> <p>1 1,500 hours.</p> <p>2 Q Okay. Is your work done on your component      3 of this?</p> <p>4 A I don't believe so, no.</p> <p>5 Q What more do you intend to do?</p> <p>6 A Well, I intend, insofar as I have the      7 obligation to testify in the proceeding next      8 month, to do more research and analysis and to      9 evaluate those elements of the record that I've      10 not had the opportunity to evaluate to date,      11 and whatever new information might come in.</p> <p>12 Q Do you intend to offer any opinions above      13 and beyond the opinions set forth in your      14 report?</p> <p>15 A No, I don't.</p> <p>16 Q Do you intend to submit another report?</p> <p>17 A No, I don't.</p> <p>18 Q Have you read the reports of any other      19 experts in the case?</p> <p>20 A Oh, yes.</p> <p>21 Q Whose?</p> <p>22 A I read Mr. Malhotra's report, Mr. Cline's      23 report, Ms. Sallee's report, portions of      24 Mr. Moore's report. I'm trying to remember      25 whether I have read other reports.</p>

Page 14

1 Q If you remember others later today, you  
2 can add them. This is not a memory test.  
3 A Oh, yes. I just try to do my best.  
4 Q I'm sure. I don't deny that. But if you  
5 don't know something, remember just tell me and  
6 we can get back to it if we need to.  
7 A Sure.  
8 Q Have you read depositions of anyone else  
9 in the case?  
10 A Yes.  
11 Q Whose depositions?  
12 A I read Ms. Sallee's deposition,  
13 Mr. Cline's deposition -- Dr. Cline's  
14 deposition, and Mr. Malhotra's deposition and  
15 Mr. Evanko's deposition. Perhaps others, I  
16 just don't recall at the moment.  
17 Q You just referred to Cline as Dr. Cline.  
18 Would you prefer I address you as  
19 Dr. Meyers?  
20 A Whichever you prefer. I -- I sometimes --  
21 I usually refer to myself that way, so he's got  
22 the degree...  
23 Q I'll do the same. Okay.  
24 I was asking about the number of hours FTI  
25 had worked so far. Do you know what the total

Page 15

1 bill has been?  
2 A I don't specifically, but I would estimate  
3 in the high six figures.  
4 Q Okay. I had asked you about depositions  
5 and other things you might have reviewed.  
6 Let me ask you this, as well: I assume  
7 you reviewed the plan of adjustment that the  
8 City has filed?  
9 A Yes.  
10 Q And the disclosure statement that goes  
11 with it?  
12 A Oh, yes.  
13 Q And various forecasts submitted by Ernst &  
14 Young?  
15 A Yes.  
16 Q Did you review the most recent ones, the  
17 ones that were dated July 2nd?  
18 A Yes, I did.  
19 Q Okay. Now some of these refer to  
20 something called, pardon me, reinvestment and  
21 restructuring initiatives?  
22 A Indeed.  
23 Q You're familiar with those?  
24 A Yes.  
25 Q I'm going to call those RRIs, because

Page 16

1 that's an easier way to refer to them, if  
2 that's all right.  
3 And when you looked at these materials,  
4 did you look at the forecasts that had baseline  
5 forecast and also the forecast that included  
6 the RRIs?  
7 A Yes.  
8 Q Do you have a definition of the RRIs that  
9 you used or is it just a phrase you're  
10 comfortable with using generally?  
11 A It's a phrase I've not used in my memory.  
12 I believe I have some sense of what the City  
13 means when it employs that phrase, as being  
14 initiatives purportedly contingent on  
15 acceptance of its plan.  
16 Beyond that, I wouldn't say.  
17 Q Do you have any opinions or were you asked  
18 to reach any opinions about the viability or  
19 usefulness of any of the RRIs?  
20 MR. SMITH: Objection. Form.  
21 A I was not asked to render an opinion on  
22 that.  
23 Q Okay. Do you have an opinion?  
24 A Yes.  
25 Q What is your opinion?

Page 17

1 A Well, I have at least two. And most  
2 generally, as is also true, I must say, of the  
3 City's financial forecast, I discern a lack of  
4 groundwork, so to speak, a lack of vigorous  
5 analysis to justify the conclusions reached as  
6 to benefit versus cost.  
7 And I'm afraid I can't be anymore specific  
8 about that at the moment, but that is certainly  
9 one opinion that I do have.  
10 Q Okay. You said --  
11 A Secondly -- I do have two.  
12 Q That's what I was going to ask you about,  
13 the second one. That's right.  
14 A My second view is that to all appearances,  
15 at least to me, several -- there is overlap  
16 between the initiatives stated in the documents  
17 we're discussing and those which have -- were  
18 begun in 2012, if not earlier, under the Bing  
19 administration.  
20 So the characterization of those  
21 initiatives as being contingent on acceptance  
22 of the plan is, in my view, somewhat  
23 questionable.  
24 Q Okay. Good. Okay. Let's go to your  
25 report. I'm going to -- what I'm going to do

Page 18

1 here, just so you know what I'm going to do, is  
 2 go through all of your opinions one by one and  
 3 then we'll get to other parts of your report.

4 I'm going to start with the opinions.  
 5 Okay? I think those start early on in the  
 6 report. I should know where they begin, but I  
 7 don't seem to.

8 There we go. I should have started at the  
 9 beginning, shouldn't I? So let's start on  
 10 Page 3. And is it correct, Dr. Meyers, to say  
 11 that on Pages 3 through 5 you have listed seven  
 12 different opinions and there is a table, as  
 13 well, there that relates to at least one of  
 14 your opinions?

15 A Yes.

16 Q Okay. Let me ask you a few background  
 17 questions. Just, first of all, as a general  
 18 matter, what did you base your opinions upon?

19 A Well, a great many things. I've done  
 20 quite a lot of research over the past several  
 21 months going to the assumptions made by the  
 22 City and its experts in deriving their  
 23 forecasts.

24 I've evaluated -- that is, my team and I  
 25 had evaluated Ernst & Young's financial model

Page 19

1 to the extent that it lends itself to an  
 2 evaluation by anyone other than Ernst & Young.  
 3 And in addition, I have tested the  
 4 reasonableness of the assumptions made by the  
 5 City's experts by relating them to economic  
 6 drivers determining tax revenues for the City,  
 7 and additional information of significance that  
 8 might not be quantitative but, rather  
 9 qualitative.

10 Of course, my analysis also dealt, to some  
 11 degree at least, with information revealed by  
 12 the experts in their depositions, and also by  
 13 the City's expert, Mr. Evanko specifically in  
 14 his.

15 My conclusions are also based on my  
 16 readings throughout my career, you know, my  
 17 academic education, what I have learned since  
 18 as to what is appropriate methodology and what  
 19 is not in a forecasting. Knowledge which I  
 20 should add also relates to my evaluation of the  
 21 tax measures indicated in my testimony.

22 Q Have you made assumptions in the course of  
 23 your work?

24 A I am sure there are assumptions embedded  
 25 in my work, as is true in virtually any sort of

Page 20

1 analysis that abstracts to some degree from  
 2 the -- from the fullness of reality, let me put  
 3 it in those terms.

4 Economists, as I am sure you know, are  
 5 typically abstract to some degree in assessing  
 6 economic policy and in developing forecasts.  
 7 The extent of the abstraction and the  
 8 reasonableness of the forecast -- of the  
 9 assumptions, rather, of course varies greatly.

10 Q If any of your assumptions changed, would  
 11 your conclusions change?

12 A Well, I'm afraid I can't say that. I  
 13 certainly can't say yes to a question like that  
 14 because, for example, I might, in evaluating  
 15 the reasonableness of the City's forecast,  
 16 refer to a macroeconomic statistic that  
 17 influences tax revenue. Let's call it, just by  
 18 way of example, gross domestic product.

19 Now, it's certainly not the case that a  
 20 minute change in an independent forecast of  
 21 gross national -- pardon me, gross domestic  
 22 product, once it was called gross national  
 23 product, that a minute change in that variable  
 24 would alter my conclusions here.

25 So it really is both a matter of which

Page 21

1 assumptions in particular and of the degree to  
 2 which those assumptions might be modified.  
 3 Q Okay. Do you have an open mind about  
 4 possibly changing your conclusions if new data  
 5 becomes available?

6 A I always do, and that's one reason why I  
 7 try to keep my work as -- as updated as  
 8 possible.

9 Q Now, I assume, although you are retained  
 10 as an expert in the case, you're not advocating  
 11 that any particular side ought to win or lose  
 12 the case, correct?

13 MR. SMITH: Objection. Form.

14 A I, frankly, don't even understand what win  
 15 or lose in this context means. So the answer  
 16 would certainly be yes.

17 Q Is it fair to say that you view your role  
 18 as bringing your expertise to the facts of the  
 19 case and rendering an expert opinion which, in  
 20 your judgment, is fair, accurate and based on  
 21 the science or discipline of economics?

22 A Yes.

23 Q Okay. During the break I have a funny  
 24 story to tell you about the science of  
 25 economics. Remind me to tell you the story.

	Page 22		Page 24
1	So let's go to --	1	ourselves to one way of looking at reliability.
2	A I can imagine.	2	Q Sure.
3	Q Well, it is a very funny story.	3	A It's important to bear that in mind. And
4	Let's start with Opinion No. 1. That's on	4	the way of looking at reliability, which is
5	Page 3.	5	limited to, as I indicated a moment ago,
6	You say: "The City's forecasts are an	6	trends, for example, that lend themselves to an
7	unreliable basis for evaluating future cash	7	equation, right, as a regression equation, and
8	flows." Let me just focus on that.	8	there is, indeed, one such that I use here,
9	What do you mean when you say	9	which I'm sure you know.
10	"unreliable"?	10	In those instances, and, again, confining
11	A In my view, they don't provide reliable	11	ourselves to that way of looking at
12	guidance to the Court in developing a notion of	12	reliability, typically, not just in economics
13	the degree to which the City's revenues are	13	but in other disciplines, 90 and 95 percent
14	either sufficient or insufficient to meet	14	confidence intervals are employed, although not
15	creditor's claims, for example.	15	always.
16	Q Now, you used the word "reliable" in my	16	Q I understand. But if something has a 90
17	answer --	17	or 95 percent confidence level, is it generally
18	A I'm so sorry.	18	viewed as reliable?
19	Q -- in your answer to my question.	19	MR. SMITH: Objection. Form.
20	A A sound basis.	20	A Again, I would say that reliability is one
21	Q A sound basis. Okay.	21	standard -- pardon me. What we've just been
22	Now, in the discipline of economics, is	22	discussing is one standard for reliability.
23	that ever expressed in terms of percentages,	23	But, pardon me, there are many situations
24	like reliable means accurate within 50 percent	24	in which one needs to refer to other factors in
25	or anything like that?	25	order to make a judgment about reliability.
	Page 23		Page 25
1	A Of course.	1	Q Okay. Is it fair to say there is no one
2	Q What is, in the discipline of economics,	2	rule?
3	the variance for reliable?	3	A Fair to say.
4	MR. SMITH: Objection. Form.	4	Q Okay. Now, we're looking at the first
5	A Their one interpretation of the word in	5	opinion which is about forecasts.
6	the science is the degree of precision of the	6	By definition, of course, forecasts are
7	estimate, or the confidence in the forecast	7	predictions?
8	in -- pardon me, in statistical terms.	8	A I'm using the word interchangeably.
9	Q Okay. And is there a particular number,	9	Q By the way, do you distinguish between a
10	confidence number or ratio or percentage or	10	forecast and a projection?
11	whatever that is usually used in association	11	A Not usually, no.
12	with determining that something is or is not	12	Q I'm not going to either. But somebody
13	reliable?	13	told me there is a difference, but there isn't
14	MR. SMITH: Objection. Form.	14	one to me and I will just use the phrase and I
15	A There are, on occasion, measures of	15	don't mean to confuse you.
16	reliability as relates to the establishment and	16	A I think we understand each other.
17	analysis of a confidence interval --	17	Q Okay. Can you tell me what it is that
18	Q Okay.	18	makes the City's forecast unreliable to you, in
19	A -- where a trend, for example, lends	19	your opinion?
20	itself to that sort of analysis.	20	A Oh, my goodness. A lot.
21	Q Okay. What number or what level of	21	Q Okay.
22	confidence would you associate with being	22	A And I refer to some of the factors, but
23	reliable, if there is one?	23	not all, in my report.
24	MR. SMITH: Objection. Form.	24	In the City's forecast, I discern both a
25	A Here again -- here again, we're confining	25	lack of objectivity and a capriciousness in the

Page 26

1 choice of assumptions. I find assumptions that  
 2 have no real basis. In fact, in my view, I  
 3 find method that is actually not so much method  
 4 as an agglomeration of assumptions that then  
 5 are processed in some way to arrive at a  
 6 conclusion by means of a cogitation -- I don't  
 7 know what -- what other word to use for it.  
 8 Non-transparent methods to arrive at a  
 9 conclusion based on assumptions that are in  
 10 many cases implausible.

11 I also find that the opacity of method,  
 12 the lack of information on what was done -- the  
 13 lack of full information on what was done and  
 14 full specification of what was done to be a  
 15 very significant barrier to anyone attempting  
 16 to assess the procedures followed.

17 I believe Ms. Kopacz is in agreement with  
 18 me on this and, you know, having done this sort  
 19 of work for over 40 years, I've always  
 20 consistently found that when there is a lack of  
 21 transparency, when the black box is employed  
 22 time and again, and the resort is made to it's  
 23 my judgment as opposed to a set of facts and a  
 24 discernible method that can be evaluated, that  
 25 in such instances there are improprieties in

Page 28

1 Q I assumed you had. You had mentioned it  
 2 before, I just wanted to reiterate that.  
 3 A Oh, thank you.  
 4 Q You said, and I may be misquoting you, but  
 5 I heard you to say a 10-year forecast strikes  
 6 you as a very long period of time to forecast.  
 7 A Oh, yes.

8 MR. SMITH: Objection.  
 9 Q What is a more appropriate forecast period  
 10 if one is looking to maximize reliability?

11 A Well, one hour. I mean, I'm not being  
 12 glib. The point is the shorter the period, the  
 13 other things equal, the more reliable your --  
 14 one's forecast is going to be.

15 Q Let me put it this way: You testified  
 16 about your work for the Police Sergeants  
 17 Benevolent Association in New York City and a  
 18 comparable project for Nassau County.

19 A Indeed.

20 Q How long were those forecasts?

21 A They reached out, I believe, three years  
 22 or so. Perhaps five. Certainly not more than  
 23 that.

24 Q Okay. And those are periods that you were  
 25 comfortable forecasting with all the caveats

Page 27

1 the analysis. And I'm using the word  
 2 impropriety in the most general sense of the  
 3 word, not to suggest anything unethical or  
 4 anything like that.

5 Q Nor criminally.

6 A So, these are some of the considerations  
 7 that lead me to conclude that the City's  
 8 forecasts are unreliable. But beyond that, at  
 9 least with respect to property tax revenue, as  
 10 you know, I've done an independent analysis,  
 11 and mind you, a 10-year forecast is something I  
 12 will never do unless it is absolutely  
 13 necessary.

14 Compelled by circumstances in this case to  
 15 venture forth into the world of 10-year  
 16 forecasts, I did so, as best I could, in order  
 17 to develop estimates that in my view were more  
 18 plausible than the City's, solely as a means of  
 19 assessing the reasonableness of what Ernst &  
 20 Young and others might have done in respect to  
 21 property tax forecasting, revenue forecasting.

22 Q By the way, you mentioned Ms. Kopacz.

23 Have you read her report?

24 A No, I have not. Oh, I'm sorry. Yes,  
 25 indeed. I certainly did.

Page 29

1 that accompany forecasts?

2 A Forecasting in this particular sense. I  
 3 did not develop independent numerical  
 4 forecasts. I rather sought to determine -- and  
 5 this goes back a few years, but I'll do my best  
 6 to recall -- I rather sought to determine the  
 7 likelihood that an improvement in the City's  
 8 economic situation which then prevailed would  
 9 extend for another three, four, perhaps five  
 10 years, as opposed to a situation in which there  
 11 was a reversal.

12 Q Okay. So do I understand correctly you  
 13 took whatever the City was experiencing and you  
 14 were looking out a few years to see what would  
 15 happen if it continued on that trend or if  
 16 there were other trends?

17 A Not quite what you just said. But to --  
 18 to determine whether the upward trend then  
 19 prevailing would continue. And I did that,  
 20 among other things, by reference to external  
 21 forecasts of the relevant macroeconomic  
 22 value -- variables in coming years.

23 Q Sure.

24 A As well as long-term history in terms of  
 25 the length of cycles, both nationally and

Page 30

1 within the City, and how the two were or were  
 2 not linked.  
 3 Q How far out did your forecasting go in  
 4 those two engagements?  
 5 A Forecasting in the sense that I just said?  
 6 Q As you just described it.  
 7 A Yes. Again, I would estimate somewhere  
 8 between three and five years.  
 9 Q Okay. That's fine. Let's go back to your  
 10 opinion.

11 What would the City have to do, in your  
 12 opinion, to make its forecast more reliable  
 13 or -- withdraw that question.

14 Using your definition of "reliable," what  
 15 would the City have to do to make its forecasts  
 16 reliable?

17 MR. SMITH: Objection. Form.

18 A Well, again, in the first instance, it's  
 19 not my view that a 10-year forecast is  
 20 reliable, particularly given possible policy  
 21 changes and so forth. But even without -- even  
 22 if one unrealistically held that variable  
 23 constant, such are the fluctuations in the  
 24 state -- and the condition of the national and  
 25 state and local economies that you get

Page 32

1 Q Okay.  
 2 A Ample examples can be found elsewhere.  
 3 Q Okay. I'm going to go to your second  
 4 opinion.  
 5 A Yes.  
 6 Q Your second opinion is: "Contributing to  
 7 this unreliably -- unreliability are  
 8 inadequately documented and/or demonstrably  
 9 false assumptions, non-transparent methods, and  
 10 unschooled economic reasoning. Taken together  
 11 and considered overall, the City's expert  
 12 reports, report data sources, updated financial  
 13 model and Fourth Amended Disclosure fail to  
 14 meet commonly accepted scientific standards of  
 15 rigor, objectivity and disclosure."

16 You have already, I think, described to me  
 17 some of your criticisms as to the approach the  
 18 City made as to its assumptions. I think you  
 19 said they were capricious and implausible.

20 A In many instances, yes.

21 Q Okay. So let me ask you this: Tell me  
 22 what -- when you, pardon me, refer to  
 23 "inadequately documented assumptions," is that  
 24 the same point you made a few minutes ago or is  
 25 this referring to something else?

Page 31

1 variances that may virtually eliminate the  
 2 usefulness of the forecast, if you see what I  
 3 mean.

4 And I apologize, but I lost track.

5 Q I'm just asking what, in your opinion,  
 6 would the City have to do to make its forecasts  
 7 reliable?

8 MR. SMITH: Same objection.

9 A I understand. Well, actually what I just  
 10 said goes to that point. Because, as I said, I  
 11 don't believe a 10-year forecast is reliable.  
 12 I believe that to arrive at the best possible  
 13 unreliable forecast, the least unreliable  
 14 forecast, the City would have to apply  
 15 procedures, at least in part, similar to those  
 16 which I apply here, their experts, rather, or  
 17 of course, possibly the City themselves.

18 They would, I believe, benefit from  
 19 consultation with third parties who are not  
 20 involved in this litigation and individuals  
 21 with expertise, economic expertise, of course,  
 22 but also financial and fiscal expertise, so to  
 23 speak, in undertaking forecasts of any of the  
 24 variables at issue here. More broadly, follow  
 25 procedures generally followed in this area.

Page 33

1 A I believe it is the same point I made.  
 2 Q And "false assumptions" also the same  
 3 point?

4 A Same point.

5 Q And "non-transparent reasoning"?

6 A Same point.

7 Q Okay. Then you say "unschooled economic  
 8 reasoning."

9 A Yes.

10 Q I'm not sure you covered that before.

11 What is "unschooled economic reasoning"?

12 A I'll give you an example.

13 Q Okay.

14 A Ms. Sallee. Ms. Sallee's use of average  
 15 residential home sales prices as a means of  
 16 estimating price trends is an example of  
 17 unschooled economic reasoning -- pardon me,  
 18 unschooled reasoning in that area of -- of  
 19 analysis.

20 Q Why is that unschooled?

21 A Well, as I indicated in my report, the --  
 22 and this actually intersects with sampling  
 23 theory in an important way.

24 Over time there can be changes in the mix  
 25 of homes sold. To pick an extreme case, let's

Page 34

1 suppose, just by way of example, that in Period  
 2 1 sales consist entirely of a hundred  
 3 thousand -- in Detroit a 100,000-dollar home  
 4 would be pretty good, relative to, I think --  
 5 well, yeah, certainly because the median value  
 6 in 2012 is something like 40,000. As judged,  
 7 at any rate, by the homeowner. Let's take  
 8 \$100,000 and say that in Period 1 all homes  
 9 sold were 100,000-dollar homes in good  
 10 neighborhoods, in good shape. Well-maintained  
 11 100,000-dollar homes in desirable  
 12 neighborhoods.

13 And then in Period 2, all homes sold were  
 14 dilapidated, in poor neighborhoods and perhaps  
 15 inherently undesirable for other reasons. You  
 16 look at the price of homes -- the average price  
 17 of homes in that Period 1 and it is \$100,000  
 18 you look at the average price of homes in  
 19 Period 2 and it's \$20,000.

20 Is that 80 percent decline indicative of  
 21 changes in the price of the housing stock  
 22 overall? Of course not. And on top of  
 23 conditions such as those, which relate to the  
 24 character of the properties being sold, you  
 25 have the conditions of sale, which can have a

Page 36

1 which Ms. Sallee apparently had interest in at  
 2 one point but then lost interest in another,  
 3 coincidentally the trend in the index taking an  
 4 adverse turn, from her point of view.

5 And, by the way, that is not the only case  
 6 of such behavior.

7 Q We'll get to those. Okay.

8 Have you told me everything you could  
 9 think of that would fall into the category of  
 10 unschooled economic reasons?

11 A No. Not by any means. I'm using that as  
 12 an example.

13 Q We'll come to more of that in the report.  
 14 Opinion 3, you talk about a 10-year -- I'm  
 15 going to just read from the record, so I don't  
 16 end up characterizing it.

17 You said: "Combined with alternative  
 18 forecasts of property tax revenue, a 10-year  
 19 property tax increase and a tax on inbound  
 20 commuters could yield from \$1.0 to  
 21 \$1.6 billion in incremental General  
 22 Fund-related revenue from FY '14 through FY  
 23 2023 above the City's forecast, even if one  
 24 disregards the immediate stimulative effect of  
 25 proposed reinvestment on the City's economy."

Page 35

1 very important influence on price, as we know.  
 2 The State of Michigan, not unlike many  
 3 others, the criterion for fair value in a  
 4 transaction is arm's length sale by willing --  
 5 by a willing seller. If instead of that you  
 6 have a bank that is very anxious to get off its  
 7 hands a foreclosed upon property, you know,  
 8 that can be construed as something other than a  
 9 sale at fair value.

10 Likewise, a transaction between a father  
 11 and a son, to pick a simple example, I want to  
 12 give my son some help, so I'll sell him my  
 13 house for, you know, a quarter of what it's  
 14 worth. And to pick another sort of case,  
 15 Enron. You know, many transactions amongst  
 16 related parties entailing prices that have  
 17 virtually no meaning at all from an economic  
 18 standpoint. Perhaps from a tax standpoint,  
 19 yes, but not from an economic standpoint.

20 So for those and probably other reasons,  
 21 use of a trend or, for that matter, the value  
 22 of -- the average value of homes sold is not at  
 23 all at a firm basis for evaluating price trends  
 24 or the value of the housing inventory overall.

25 Far better, of course, is Case-Schiller,

Page 37

1 So tell me, first of all, how you reached  
 2 that conclusion.

3 A I reached it through the analyses that are  
 4 described in my report and also reflected in my  
 5 schedules. And I suppose we can do this in as  
 6 much detail as you would like.

7 Q I'll probably just go through your report  
 8 and get to that later. If you would just  
 9 prefer to put it off --

10 A I would.

11 Q -- let's do it.

12 A -- more efficient to wit the discussion  
 13 than what is actually in the report.

14 Q Let me just ask you a general question.  
 15 Do you understand that there cannot be a  
 16 property tax increase for Detroit without a  
 17 change of the law of the State of Michigan?

18 MR. SMITH: Objection. Form.

19 A That's not my understanding.

20 Q Okay. Do you understand that there cannot  
 21 be a change in the tax on inbound commuters  
 22 without a change in the law of Michigan?

23 MR. SMITH: Objection. Form.

24 A I cannot render an opinion as to the  
 25 legality of any hypothetical --

Page 38

1 Q Okay.  
 2 A -- in my report.  
 3 Apart from noting that, as I understand  
 4 it, with reference to the property tax, there  
 5 is, in the case of a judgment, a requirement  
 6 that the City raise property tax sufficiently  
 7 to cover the judgment.  
 8 Q Okay. What -- to the extent you have a  
 9 belief as to anything involving the laws of  
 10 Michigan, where did your belief as to the law  
 11 come from?  
 12 MR. SMITH: Objection. Form.  
 13 A Well, in this case, Mr. Evanko.  
 14 Q Okay. Anyone else?  
 15 A Counsel, as well.  
 16 Q Okay.  
 17 A Mind you, please, I must -- I must  
 18 emphasize I am not an attorney and I don't  
 19 venture legal opinions. I cited Evanko and  
 20 counsel as providing me with information that  
 21 would make me less than ready to accept the  
 22 premise that the City would be unable to raise  
 23 taxes without some modification to current law.  
 24 Q And by counsel, you're referring either to  
 25 Mr. Smith or his law firm?

Page 39

1 A Yes.  
 2 Q Okay.  
 3 MR. STEWART: And let me just ask  
 4 Mr. Smith this question: Would you invoke a  
 5 privilege if I were to ask him about the  
 6 substance of his communications with you?  
 7 MR. SMITH: Well, you've already asserted  
 8 a privilege over all communications with  
 9 your -- with your experts, so I think we'll  
 10 just follow the rule that you've established.  
 11 MR. STEWART: Okay. So you would instruct  
 12 him not to answer?  
 13 MR. SMITH: Well, I'm just saying that I'm  
 14 going to follow the rule that you -- you laid  
 15 down, which is that you instructed your witness  
 16 not to answer those questions.  
 17 MR. STEWART: Okay.  
 18 BY MR. STEWART:  
 19 Q Dr. Meyers, did you receive from counsel  
 20 anything in writing that contained a legal  
 21 analysis as to the ability of the City of  
 22 Detroit to raise taxes?  
 23 MR. SMITH: You've -- you've --  
 24 Q Yes or no, whether you got anything in  
 25 writing.

Page 40

1 MR. SMITH: Well, you've already -- you  
 2 refused to allow your witnesses to talk about  
 3 any kind of communications with -- I mean with  
 4 your experts to communicate with you. So  
 5 you're asking questions that are outside the  
 6 scope of the rule you've laid down.  
 7 MR. STEWART: Are you instructing him not  
 8 to answer?  
 9 MR. SMITH: No. He already answered that  
 10 there wasn't anything, but...  
 11 BY MR. STEWART:  
 12 Q Did you -- was your answer that there was  
 13 nothing in writing?  
 14 A That's correct.  
 15 Q Okay. How many conversations did you have  
 16 with counsel on the subject of the legal  
 17 ability of the City of Detroit to raise its  
 18 taxes?  
 19 MR. SMITH: You've also -- you refused to  
 20 let your witnesses answer similar questions. I  
 21 mean, it's -- I don't care if you answer how  
 22 many questions, but I'm just saying your -- you  
 23 are asking a bunch of questions that are  
 24 inconsistent with your instructions to your  
 25 witnesses not to answer anything about that.

Page 41

1 A To the best of my memory, the topic arose  
 2 in two or three conversations.  
 3 Q And how long were those conversations?  
 4 MR. SMITH: Now that's just -- you're  
 5 getting into areas where you won't let your  
 6 witness answer.  
 7 MR. STEWART: Just the length.  
 8 MR. SMITH: I know, but you wouldn't let  
 9 your witnesses answer even how many there were.  
 10 So I think we'll apply the rule again that you  
 11 laid down in the prior depositions.  
 12 MR. STEWART: So are you instructing him  
 13 to not answer the question?  
 14 MR. SMITH: I'm just following the rule  
 15 that you -- you instructed your witnesses not  
 16 to answer that type of question.  
 17 BY MR. STEWART:  
 18 Q Doctor, you may answer my question until  
 19 your counsel tells you not to.  
 20 A Sure.  
 21 Q In total, how long were these  
 22 conversations?  
 23 A Well, one conversation was a meeting which  
 24 lasted, I would estimate, two hours, in which  
 25 this issue was addressed for perhaps ten

Page 42

1 minutes.

2 Q Okay.

3 A Another was an initial conversation which  
4 lasted about an hour, and in that conversation  
5 this issue was discussed for perhaps 15  
6 minutes.

7 And there may have been another discussion  
8 over the phone about it, I'm not entirely sure,  
9 but, if so, that discussion of this subject  
10 would not have lasted more than five to ten  
11 minutes, I'm sure.

12 Q And who -- who are the lawyers you spoke  
13 with in these conversations?

14 MR. SMITH: Okay. Now -- now we are  
15 getting way out of field. Your -- you've --  
16 you're asking a bunch of questions you've  
17 refused to let your witnesses answer the  
18 questions, so because you've asserted that  
19 rule, we're going to cut this off.

20 MR. STEWART: Are you instructing him to  
21 not answer?

22 MR. SMITH: I am instructing him to follow  
23 the rule you laid down, which is not to answer  
24 the questions.

25

Page 44

1 recall Mr. Hackney -- oh, yes, and  
2 Mr. Widenhammer, is it?

3 MR. SMITH: No. Weidenhammer.  
4 A Weidenhammer, pardon me.

5 Q Okay. Anyone else you can think of?  
6 Mr. Smith himself on any of these?

7 A I may have discussed this with him. I  
8 just don't recall.

9 Q A lawyer named Ryan Bennett?

10 A Don't recall.

11 Q Okay. Let's keep going.

12 Your Opinion No. 4: "The City's  
13 assumption that such tax measures as they are  
14 contemplated here would have a substantial  
15 adverse effect on the local economy lacks a  
16 sound scientific basis."

17 Do you see that?

18 A Yes.

19 Q How did you reach that -- that decision?  
20 That -- that opinion, I apologize.

21 A Well, through several avenues. In the  
22 first instance, there is scholarly literature  
23 going to this question of varying quality.  
24 Most, if not all of it, are inadequate for  
25 reasons set forth in my -- in my testimony

Page 43

1 BY MR. STEWART:

2 Q Okay. Dr. Meyers, I'm going to ask you  
3 this again, and your counsel -- and you must  
4 answer my question unless your counsel tells  
5 you not to.

6 A Understood.

7 Q Give me the name of the lawyers you spoke  
8 with in these conversations.

9 A The attorneys that I spoke with in these  
10 conversations included -- let me think now.

11 Mr. Hackney, Mr. Arnault. And whom else?

12 At the initial conversation that I  
13 referred to, the initial?

14 Q All of these.

15 A Lump them all together?

16 Q All together if it makes it easier for  
17 you.

18 A Lump them all together. Sure.

19 There were two other attorneys present at  
20 that initial conversation whose names I don't  
21 recall, I'm afraid.

22 Likewise, for the somewhat longer  
23 conversation, or rather the meeting, that  
24 two-hour meeting I referred to, there were  
25 perhaps five attorneys present, and I only

Page 45

1 having to do, broadly speaking, with the  
2 complexity of many factors that dictate  
3 property value, apart from property taxes.

4 There is -- beyond that, there are -- or,  
5 rather, beyond that there are surveys and other  
6 qualitative analyses of the determinants --  
7 pardon me. The determinants of business  
8 locational decisions that have relevance.

9 There is also the fact that something like  
10 only 1 percent of the cost of businesses in the  
11 City would be -- total property taxes, county,  
12 school and whatnot altogether, within that  
13 there is something like only 1 percent of total  
14 costs, and costs themselves wouldn't be the  
15 only consideration in respect to a business  
16 locational decision.

17 So, those are among the sources or  
18 analyses from which I drew this conclusion.

19 Q Is it your -- is it your opinion that an  
20 increase in property taxes would have an  
21 adverse effect on home prices?

22 MR. SMITH: Objection. Form.

23 A My analysis here incorporates an  
24 assumption that that would, in fact, be the  
25 case, that other things equal, an increase in

Page 46

1 property taxes, a 10-year increase as  
 2 postulated here, would reduce property values  
 3 by an amount commensurate in Year 1, which is  
 4 essentially a forward looking projection of  
 5 what the liability is, diminishing on a pro  
 6 rata basis year after year until you reach Year  
 7 11 in which there is no effect on value  
 8 whatsoever.

9 So I incorporate that assumption here for  
 10 the sake of what you might call theoretical  
 11 completeness. I am by no means sure that that  
 12 would actually take place, but I felt it  
 13 appropriate to do so.

14 Q So just to -- I'm not sure -- I -- just  
 15 like you say, you don't act like a lawyer  
 16 because you're not one. I know nothing about  
 17 economics, so I apologize for my ignorance on  
 18 this.

19 Just to see if I understood you, so if  
 20 there is a billion -- I'm just going to choose  
 21 a billion, it could be any number. If there is  
 22 a billion dollar increase in property taxes  
 23 over 10 years, you would assume that would  
 24 reduce property values by a billion dollars?

25 MR. SMITH: Objection. Form.

Page 48

1 economist would use.

2 MR. SMITH: Objection. Form.

3 A It was an effort on my part to make a  
 4 concession to that school of thought that  
 5 believes that markets are efficient and that  
 6 changes like -- absolutely right, and changes  
 7 like this will, indeed, have proportionate and  
 8 so forth.

9 Q Just before we leave that area and our are  
 10 example of the thousand dollar encumbrance,  
 11 would you, as an economist, reduce that to  
 12 present value in Year No. 1?

13 MR. SMITH: Objection. Form.

14 A Yes.

15 Q Okay.

16 A Which, parenthetically, I did not do,  
 17 again, to be conservative in my analysis here.

18 Q In Ms. Kopacz's deposition, I learned of a  
 19 distinction between something called nominal  
 20 dollars and --

21 A I'm sure you did.

22 Q -- and some other kind of dollar.

23 Were you using nominal dollars in the  
 24 example you just recited?

25 A Yes.

Page 49

1 A Well, let me try to lay it out a bit more  
 2 carefully, and not to suggest that you're doing  
 3 anything wrong in your representation of it.

4 Q I probably am.

5 A To make it as clear as I can, let's assume  
 6 hypothetically that I have a 50,000-dollar  
 7 house, right? And I am now paying on that  
 8 house property tax such that when all is said  
 9 and done amounts to \$500 general fund related.  
 10 And now let's assume that that rate goes up to  
 11 a hundred -- by \$100 a year to 600, right? And  
 12 that there is now the obligation to pay the  
 13 City/County, another hundred dollars a year as  
 14 a consequence of that, and that obligation will  
 15 persist for 10 years, and now let's -- so you  
 16 add it all up and in Year 1, on a forward  
 17 looking basis or encumbrance, if you wish to  
 18 look at it that way, of a thousand dollars on  
 19 the house, I, as a buyer of that house would,  
 20 at least in theory, take it into consideration  
 21 and lower my bid commensurately. That's the  
 22 logic.

23 Q Okay. I understand. And that's how an  
 24 economist would look at it.

25 Not just logical, but it is an approach an

1 Q Okay. For the record, can you tell me  
 2 what a nominal dollar is?

3 A A nominal dollar is a dollar whose real  
 4 purchasing power changes over time by what we  
 5 refer to as the rate of inflation.

6 A real dollar or a constant dollar-dollar  
 7 is a dollar of constant purchasing power. For  
 8 example, I am picking a reference time out of  
 9 the air, 1985 I think is a date that's often  
 10 used, a 1985-dollar, which, as we all know,  
 11 bought more than does a 2014-dollar.

12 So in looking at a real dollar, constant  
 13 dollar numbers adjust for the diminishing  
 14 purchasing power of the dollar over time as a  
 15 consequence of inflation.

16 Q Okay. Thank you.

17 Let's go to Opinion No. -- well, we have a  
 18 table here on Page 4 of your report.

19 Do you have that open to Page 4?

20 A Yes.

21 Q Okay. And this table reflects certain --  
 22 certain elements of the opinions we've been  
 23 talking about, correct?

24 A Yes.

25 Q Tell me, if you could, just what this

Page 50

1 table represents.  
 2 A This table represents my estimate of the  
 3 incremental revenue that would be generated --  
 4 well, yes, let me backtrack.  
 5 Take the table more systematically. The  
 6 table reflects my estimate, first of all, of  
 7 the added revenue that would -- the property  
 8 tax revenue, that is, that would result from an  
 9 adjustment of the City's forecast to what, in  
 10 my view, is a more plausible one.  
 11 Also taking into consideration the change  
 12 in value, which we have just been discussing as  
 13 associated with each of the alternative tax  
 14 rates, the table also reflects my estimate of  
 15 the effect of different collection rates, I  
 16 should call them incremental collection rates,  
 17 on what the City would gain -- the net gain to  
 18 the City from those changed revenues.

19 Q Okay.  
 20 A And in addition, of course, the table also  
 21 indicates my estimate of what revenues would be  
 22 forthcoming from an inbound commuter tax of the  
 23 sort I describe later in the report.  
 24 Q There are three footnotes to this table.  
 25 They parallel one another. The first one says:

Page 51

1 "Reflects estimated reduction in property  
 2 values due to 38.9 percent increase in the  
 3 property tax rate."  
 4 Is that what we were talking about a  
 5 minute ago?  
 6 A Exactly.  
 7 Q Can you tell me, from looking at this or  
 8 otherwise, just how much the reduction is in  
 9 property values due to the 38.9 percent  
 10 increase in the property tax?  
 11 MR. SMITH: Objection. Form.  
 12 A I can't do that off the cuff, so to speak.  
 13 I would have to consult my schedules.  
 14 Q Okay. When you say "schedules," what do  
 15 you mean?  
 16 A Well, the report contains schedules which  
 17 set forth various calculations entailed in the  
 18 derivation of the numbers shown in this and  
 19 other tables in the report.  
 20 Q Do you know where the schedule is in your  
 21 report that relates to these footnotes?  
 22 A Well, if you give me a moment, I will try  
 23 to identify them.  
 24 Q Okay. Thanks.  
 25 A (Witness views document.)

Page 52

1 Well, Schedule 1, certainly, first of all,  
 2 and now allow me to continue to look.  
 3 Q Sure.  
 4 A (Witness views document.)  
 5 Schedule 4.0. Oh, I see. 4.1 and 4.2, I  
 6 believe, relates to those numbers and those  
 7 notes.  
 8 Q Where on those schedules does it tell us  
 9 what the amount of the decline in property  
 10 values would be from the increase in the  
 11 property tax rate that you were telling me  
 12 about a minute ago?  
 13 MR. SMITH: Objection. Form.  
 14 A Well, that -- I don't -- I don't see them  
 15 at the moment. I don't see that number in  
 16 these tables, but that number is certainly  
 17 implicit in these tables.  
 18 Q Okay.  
 19 A And may, in fact, be in these tables  
 20 somewhere, but there are a lot of numbers and a  
 21 lot of tables, so I can't, right off the bat,  
 22 identify that one.  
 23 Q Are these tables Excel spreadsheets?  
 24 A Oh, yes.  
 25 Q Okay. Would the document in native form

Page 53

1 show the formulas and assumptions used to get  
 2 to the values we see on them?  
 3 A I'm sure.  
 4 And two points; those have been, I  
 5 believe, provided and; secondly, I believe that  
 6 these schedules, even as they stand, coupled  
 7 with the text in the report, suffice for one to  
 8 construct the number that you just asked about  
 9 even if the number is not explicitly listed  
 10 here.  
 11 Q Could you construct the number for me  
 12 sitting here right now?  
 13 A I don't know. I might be able to and I  
 14 might not.  
 15 Q Okay. All right. Let's go, then, to 5  
 16 where you write: "The City also fails to fully  
 17 take into account other potential revenue  
 18 sources and cost saving measures, such as the  
 19 further privatization of City assets; the  
 20 shifting of City responsibilities to other  
 21 government entities; the potential for  
 22 increased fees or other revenue-generating  
 23 measures; increased grants from other  
 24 government entities, private entities and other  
 25 sources; and other actions that would increase

1 the City's revenues going forward and/or reduce  
 2 its cost."

3 I hope I read that accurately.

4 A I'm sure you have.

5 Q Okay. So let me ask you about this: How  
 6 did you go about reaching this conclusion?

7 A Well, here again, at least in part, by  
 8 reviewing the record in the proceeding, the  
 9 submissions of the City itself, and those of  
 10 Ernst & Young and other parties to the  
 11 litigation.

12 In addition, secondary source literature  
 13 that would include articles in the press and  
 14 statements by the City made outside the context  
 15 of this litigation, deposition testimony.

16 Q Okay. In other words, all of the work  
 17 you've been doing on this case that you've told  
 18 me about --

19 A -- feeds into this to some extent, yes.

20 Q Okay. Let me ask you about the -- you  
 21 have a phrase here, "the further privatization  
 22 of City assets."

23 What City assets are you referring to?

24 A The -- I'm using the word "privatization"  
 25 in the broad sense --

1 Q That's probably why you don't have gunshot  
 2 wounds. I haven't done it either.

3 A Yes.

4 Q You mentioned shifting of City  
 5 responsibilities to other government entities.  
 6 What responsibilities in particular are  
 7 you referring to?

8 A Well, potentially I -- I believe there  
 9 probably are several. We have seen that in the  
 10 case of property tax collection already. I --  
 11 I -- I suspect that there are other areas in  
 12 which a shift in the burden to the county or  
 13 the state, for that matter, might -- oh, I can  
 14 just -- something else just occurred to me.

15 Another example being the so-called  
 16 piggybacking of the income tax, City income tax  
 17 return on the State's. I suspect the State  
 18 could do it more efficiently and that that sort  
 19 of thing which is, as I understand it, there is  
 20 some tentative agreement that's been reached in  
 21 that regard --

22 Q Okay.

23 A -- would save the City money,  
 24 administrative costs and whatnot, and also, I  
 25 would guess, quite substantially improve

1 Q Understood.

2 A -- at least back in the raw matter of  
 3 things.

4 Q Correct.

5 A Water and sewer assets are an example.  
 6 Parking system assets is another example.

7 Q Anything else?

8 A Not that comes to mind at the moment, no.

9 Q What reason do you have to believe, if  
 10 any, that the City has not, in fact, been  
 11 pursuing these initiatives?

12 A Oh, I know that they have, in fact, but  
 13 you see, all the more reason to be skeptical of  
 14 the City's revenue foreclosure given that they  
 15 proffer no forecast that allows for the  
 16 possibility that those efforts will be  
 17 realized.

18 Q I see.

19 Have you personally gone to visit any of  
 20 the City properties that --

21 A No, I have not.

22 Q Okay. All right. We know blight is  
 23 something that comes up in your report. Have  
 24 you visited any of the blighted neighborhoods?

25 A No, I have not.

1 collection rates. So there would be another  
 2 example of a shift from the City, in that case,  
 3 to the State. That's the kind of thing I'm  
 4 referring to.

5 Q Can you think of anything other than the  
 6 examples you've given me?

7 A As I sit here, no.

8 Q Have you attempted to quantify what the  
 9 savings would be from the shifting of  
 10 responsibility?

11 A No, I understand. I just had some other  
 12 thoughts, but nevermind. I can --

13 Have I attempted to quantify the savings?

14 Q Correct.

15 A I -- in respect to the shifting of  
 16 responsibilities?

17 Q Yes.

18 A No, I have not.

19 Q Or with respect to the privatization of  
 20 City assets.

21 A Well, there is information on the record  
 22 that goes to that. I believe Mr. Malhotra  
 23 testified that there is something like, is it  
 24 45 or 47 million potentially related to the  
 25 lease of the water and sewerage facilities, and

Page 58

1 20 to a hundred in respect to the so-called  
2 privatization of the parking system assets.

3 Q Okay. I was just asking whether you  
4 personally had done so.

5 A Whether I have? No, no, I have not.

6 Q Do you accept Mr. Malhotra's numbers or  
7 just look at them as another piece of evidence  
8 to accept or reject --

9 A Just the data point.

10 Q Data point. Okay.

11 There is a question here about, pardon me,  
12 increased fees or other revenue-generating  
13 measures.

14 Can you tell me any particular fees that  
15 you've looked at that could be increased?

16 MR. SMITH: Objection. Form.

17 A I have made no significant study of the  
18 yield of potentially higher fees.

19 Q Okay. Then you mentioned increased grants  
20 from other government entities.

21 Have you looked at, with any  
22 particularity, what grants could be increased  
23 and what the amount would be of such grants?

24 A This is, in fact, an area which I have  
25 looked at by no means in depth, but more than

Page 60

1 pretty sure, documents on the record which  
2 indicate that.

3 Q Okay. Have you attempted to quantify the  
4 amount of these potential grants that might be  
5 out there?

6 A No, I have not.

7 Q Or to determine which of those grants  
8 would be grants to the City's general fund, as  
9 opposed to grants that go to enterprise funds  
10 or other entities that do not co-mingle  
11 revenues with the general fund?

12 MR. SMITH: Objection. Form.

13 A They may not co-mingle, but to the extent  
14 that the City has an obligation to perform  
15 those services, relief in any particular area  
16 can manifest as relief in -- in the general  
17 fund, in my view.

18 But I have not done what you are  
19 suggesting I might have, or what you're  
20 inquiring about, no.

21 Q You mean you've not looked at a particular  
22 grant that would go to an enterprise fund and  
23 determine how much of that would relieve  
24 pressure on the general fund?

25 MR. SMITH: Objection. Form.

Page 59

1 superficially.

2 Q Okay.

3 A At some point several months ago, I  
4 endeavored to acquire information from Federal  
5 Government sources on the amount of monies  
6 being made available to the City from the  
7 Federal Government generally, and identified  
8 certain grants of -- of significant size.

9 It's not an analysis I pursued, but the  
10 impression I formed at the time was that there  
11 was a likelihood that significant additional  
12 funds would be forthcoming in the future.

13 Q Okay.

14 A And in addition, I would observe that --  
15 there is testimony here to the effect that the  
16 City -- on the part the City, I believe, to the  
17 effect that the City has not pursued grant  
18 monies as effectively as it might, and so  
19 that's another important consideration, I  
20 think.

21 Q Whose testimony?

22 A Well, Ms. Kopacz, in her report, through  
23 what I believe are interviews with third  
24 parties, reached that conclusion. But in  
25 addition, if not testimony, there are, I'm

Page 61

1 A No, I haven't.

2 Q Okay. Thanks.

3 A By the way, I should add I am using the  
4 term "pressure" here not in --

5 Q Actually, I was using the term "pressure,"  
6 not you.

7 A Oh, were you?

8 Q So -- so if it's bad term, it's my fault,  
9 not yours.

10 A I would call it moral pressure.

11 Q I didn't mean to use a word -- that's a  
12 lay word I was using.

13 A Yeah.

14 Q Then you speak of other actions that would  
15 increase the City's revenues going forward  
16 and/or reduce its costs.

17 What, in particular, do you have in mind  
18 when you refer to that?

19 A What I'm referring to there are the  
20 various initiatives as described in the first  
21 instance by the Bing administration back in  
22 early 2013, and more recently in the company's  
23 reinvestment proposals.

24 Q Okay. All right.

25 A Or, rather, estimates.

Page 62

1 Q All right. Now, Opinion 6 I'm going to  
 2 skip over because I think it refers to what  
 3 you've already talked about, but tell me if you  
 4 disagree about the problem of a 10-year  
 5 forecast.

6 A I agree.

7 Q Okay. Opinion 7, you say, and I'm going  
 8 to just read it: "Because it fails to develop  
 9 an appropriate baseline cash flow model, the  
 10 City offers no basis to conclude that the  
 11 creditors would be better off if the plan of  
 12 adjustment were confirmed as compared to an  
 13 alternative scenario in which the City's  
 14 bankruptcy petition is dismissed and its  
 15 restructuring activities continued outside of  
 16 Chapter 9."

17 So let me ask you this: Have you been  
 18 asked to or have you performed a dismissal  
 19 analysis; in other words, a study of what the  
 20 economic picture would be for the City if it  
 21 were -- if its Chapter 9 case were dismissed  
 22 and it was no longer in bankruptcy, yet still  
 23 facing creditor claims?

24 MR. SMITH: Objection. Form.

25 A In my view, a fair depiction of the

Page 62

1 I'm talking now hypothetically, had I been  
 2 responsible for doing what Ernst & Young has  
 3 done here, I think I might have been a little  
 4 more candid as to the -- the risks associated  
 5 with my numbers, and I would have provided the  
 6 Court with ranges rather than single value  
 7 estimates.

8 Q But I just asked a really narrow question  
 9 which is: Did you prepare such a schedule  
 10 showing cash -- did you, FTI?

11 A Oh, no.

12 MR. SMITH: Objection.

13 Other than -- other than your property tax  
 14 forecast.

15 A Again, it really is the same -- the same  
 16 question, because isn't the issue what are we  
 17 really going to be spending next year and what  
 18 are we really going to be earning in terms of  
 19 revenue, and whatever those real numbers are,  
 20 and let's suppose we could estimate them  
 21 accurately, you know, by gosh, those are the  
 22 numbers we would have to contend with in  
 23 negotiating with the creditors.

24 Q Right. So where in your report, if you  
 25 could direct me to it, do you summarize all of

Page 63

1 company's cash flow would be of relevance to  
 2 whatever might happen in the dismissal  
 3 scenario.

4 Q Okay. Were you asked by anyone or did you  
 5 actually prepare a study of what the cash flow  
 6 would look like for the City in a dismissal  
 7 scenario?

8 MR. SMITH: Objection. Asked and  
 9 answered.

10 Q You can answer.

11 A Well, as I said, the City's financial  
 12 circumstances in the dismissal scenario would,  
 13 to at least some degree, be revealed by a fair  
 14 depiction of its finances on a going forward  
 15 basis.

16 Such fair depiction I believe we don't  
 17 have at present. Such fair depiction,  
 18 furthermore, in my view, would indicate a range  
 19 rather than single values for each of the  
 20 relevant data series going forward.

21 You see, the -- the single estimates  
 22 provided by Ernst & Young and perhaps others  
 23 create a false impression of accuracy, and  
 24 Ms. Kopacz has helped in this area to some  
 25 degree by providing sensitivities, but had I --

Page 64

1 I'm talking now hypothetically, had I been  
 2 responsible for doing what Ernst & Young has  
 3 done here, I think I might have been a little  
 4 more candid as to the -- the risks associated  
 5 with my numbers, and I would have provided the  
 6 Court with ranges rather than single value  
 7 estimates.

8 Q But I just asked a really narrow question  
 9 which is: Did you prepare such a schedule  
 10 showing cash -- did you, FTI?

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 14 forecast.

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 16 question, because isn't the issue what are we  
 17 really going to be spending next year and what  
 18 are we really going to be earning in terms of  
 19 revenue, and whatever those real numbers are,  
 20 and let's suppose we could estimate them  
 21 accurately, you know, by gosh, those are the  
 22 numbers we would have to contend with in  
 23 negotiating with the creditors.

24 Q Right. So where in your report, if you  
 25 could direct me to it, do you summarize all of

Page 65

1 the City's claims to creditors?

2 MR. SMITH: Objection. Asked and  
 3 answered. Other than the property tax  
 4 forecast.

5 Q You've got to answer the question. Where  
 6 in your report have you summarized all the  
 7 City's liabilities to creditors?

8 MR. SMITH: Objection. Asked and  
 9 answered.

10 A I have not done that. I have not done  
 11 that.

12 Q Okay. Where in your report have you  
 13 summarized what the City's cash flows would be  
 14 outside of Chapter 11?

15 MR. SMITH: Objection. Asked and  
 16 answered.

17 A Here again, I would revert to what I said  
 18 earlier, that a more accurate so-called steady  
 19 state forecast would be at least one important  
 20 determinant of how the City would respond to a  
 21 situation in which it no longer had the  
 22 protections that it does now.

23 Q Where in your report can I find that?

24 MR. SMITH: Objection. Asked and  
 25 answered.

1 A Well, you can find my statements and in  
 2 abundance as to why I believe that the City  
 3 understates its revenue on a going forward  
 4 basis, and to that extent any rate with  
 5 reference to property tax revenue on an  
 6 adjustment to reflect that discrepancy, that  
 7 shortfall in the City's forecast would bring it  
 8 that much closer to a candid representation of  
 9 its -- of its cash flows on a going forward  
 10 basis.

11 Q Okay. So, just a narrow question, what I  
 12 need you to do is to point me to the place in  
 13 your report where you have a cash flow forecast  
 14 for the City showing all of its revenue and its  
 15 expenses where it's not in Chapter 9.

16 MR. SMITH: Objection. Asked and  
 17 answered.

18 He already told you it is throughout his  
 19 report.

20 (Multiple voices speaking at the same  
 21 time.)

22 Q What is your answer?

23 A Now I have forgotten with all of this  
 24 hubbub.

25 What was the question?

1 MR. SMITH: There is no colloquy.  
 2 A I think so. I have no representation in  
 3 my report of the City's for cash flow.

4 Q Either in or outside?

5 A Either in or out.

6 Q Okay. Thank you.

7 You had mentioned, I think more than once,  
 8 about activities, and I'm going to call them  
 9 restructuring activities, and I hope I'm not  
 10 misquoting your answer, that were undertaken by  
 11 Mayor Bing during his administration.

12 Is restructuring the word you would use or  
 13 would you use some other word than that?

14 A Restructuring is not a word I would  
 15 choose.

16 Q What's the word you would use?

17 MR. SMITH: Objection. Form.

18 A Operational improvement.

19 Q Okay. We'll use operational improvement.

20 Do you have -- could you list for me the  
 21 operational improvements under the Bing  
 22 administration that you referred to earlier  
 23 when you raised those?

24 A I have the document that indicates them.  
 25 I don't have it with me.

1 MR. SMITH: You have to wait until I -- to  
 2 make my objection and then listen to the  
 3 objection and then let him answer his  
 4 questions, so we're not talking over, for the  
 5 Court Reporter.

6 MR. STEWART: Just repeat the last  
 7 question, if you could, so we have the same  
 8 question and answer.

9 MR. SMITH: And also the objection.

10 (Whereupon, the requested question was  
 11 read back by the Court Reporter.)

12 MR. STEWART: We can call Judge Rhodes.

13 MR. SMITH: He already testified about  
 14 this twice that it was throughout his report.

15 MR. STEWART: Madam Court Reporter, just  
 16 mark this on the transcript. I'll call --  
 17 we'll find the time and we can talk to the  
 18 Judge.

19 MR. SMITH: I've got Sallee's transcript  
 20 and yours and we'll read your colloquy  
 21 throughout it.

22 BY MR. STEWART:

23 Q All right. Now, do you have the question  
 24 in mind?

25 A I think so.

1 Q Okay. That document is one of your work  
 2 papers?

3 A No. It's publication of the Bing  
 4 administration in March of '13, I believe.

5 Q Okay. Do you know the total amount of the  
 6 expenditure planned by the Bing administration  
 7 for these operational improvements?

8 A Well, I should note in the first instance  
 9 that those improvements were already underway,  
 10 at least in some cases, in early 2013. So,  
 11 it's not a matter of planning, it is a matter  
 12 of fact even at that point.

13 Q Fair point.

14 A I -- I don't. I believe the document that  
 15 I've just cited might contain some estimates.  
 16 I do not have it here with me.

17 Q Okay.

18 A What I did, you see, was cross-reference  
 19 that document with the reinvestment projects  
 20 listed in the City's plan of adjustment and  
 21 other things to the extent to which they  
 22 overlapped.

23 Q What extent did they overlap?

24 A Significantly.

25 Q Okay. Do you know, in terms of dollar

	Page 70	Page 72
1	expenditure, how the two compare?	
2	A No, I do not.	
3	MR. SMITH: Objection. Form.	
4	I just have an objection asking about the document without showing him the document.	
5		
6	MR. STEWART: Could you mark that also?	
7	MR. SMITH: What's inappropriate about	
8	that? You're asking details of -- I'm just	
9	asking you what -- what's inappropriate about	
10	that objection?	
11	MR. STEWART: The judge previously	
12	admonished counsel for interposing objections	
13	that were designed to impede an examination.	
14	MR. SMITH: I'm not impeding anything.	
15	I'm saying if you're going to ask him details	
16	about a document, it's fair that you show him	
17	the document.	
18	MR. STEWART: We've marked it. So when we	
19	talk to the judge we are going to talk about	
20	this, too.	
21	MR. SMITH: Are you saying that it is --	
22	that you can ask him about a document without	
23	showing him the document?	
24	I am just wondering because that way I can	
25	tailor my objections.	
	Page 71	Page 73
1	MR. STEWART: I'm going to call chambers	
2	at the break.	
3	MR. SMITH: If you think it's	
4	inappropriate, I would like to know, and I can	
5	refrain from asking about that, but -- or get a	
6	standing objection.	
7	MR. STEWART: I'll give you a standing	
8	objection.	
9	MR. SMITH: Okay.	
10	BY MR. STEWART:	
11	Q Now let's back to work.	
12	What cost benefit analyses, if any, did	
13	you do to analyze the effects of the	
14	operational improvements from the Bing	
15	administration?	
16	A I did no such analysis.	
17	Q Or for the restructuring and reinvestment	
18	initiatives?	
19	A Same answer.	
20	Q Okay. Good. So, let me move on.	
21	Let's start looking, if we could, at	
22	particular parts of your report, and I promise	
23	it will go faster now.	
24	A I don't mind.	
25	Q Okay. Let me start with Page 17,	

1 employment post-recession through 2011 and  
 2 increasing employment since."  
 3 That would be everything to the right of  
 4 that third dotted line, correct?  
 5 A Both the stabilization and the beginning  
 6 of the recovery, yes.  
 7 Q Okay. And you cite something here on  
 8 Page 17, you have Footnote 27 which says the  
 9 source is the U.S. Department of Commerce  
 10 Bureau of Economic Analysis, and then there is  
 11 a web link.  
 12 Is that source statistics just for the  
 13 City of Detroit or for the metropolitan  
 14 statistical area of Detroit?  
 15 MR. SMITH: Objection. Form.  
 16 A This, first of all, employment in the City  
 17 of Detroit, this is for the City of Detroit, as  
 18 I understand it.  
 19 Q City only?  
 20 A Oh, yes.  
 21 Q Okay. And that source in Footnote 27 is  
 22 also Detroit only, to the best of your  
 23 knowledge?  
 24 A Well, no. I mean, the Department of  
 25 Commerce would not be providing -- I don't

1 believe is the source of the employment data.  
 2 That would be the Bureau of Labor Statistics.  
 3 Department of Commerce, rather, would be  
 4 the source of the business cycle references.  
 5 Q I see.  
 6 A I believe.  
 7 Q So the --  
 8 A I would have to go back and check  
 9 definitely.  
 10 Q Now --  
 11 A No. That's the -- pardon me. I'm wrong  
 12 about that.  
 13 If we look at Chart 4, the footnote to  
 14 Chart 4, we see that the sources are the BLS,  
 15 as I indicated, with reference to the Detroit  
 16 employment data, and the National Bureau of  
 17 Economic Research in reference to the U.S.  
 18 business cycle key dates.  
 19 Q Okay. So going back to Paragraph 33, the  
 20 last sentence says: "Similarly, after  
 21 declining from '03 to 2009, real gross domestic  
 22 product (GDP) for the Detroit Metropolitan Area  
 23 has been increasing," and it goes on with the  
 24 numbers.  
 25 A Yes. That would be the -- the source

1 we've been discussing. Twenty-seven would be  
 2 the source of that static.  
 3 Q Okay. What is, if you know off the top of  
 4 your head, the Detroit metropolitan area?  
 5 A Comprehend several counties. Certainly it  
 6 is larger than the City of Detroit itself, but  
 7 I believe it's the smallest geographic unit for  
 8 which data of this kind is available.  
 9 Q All right. How does the data for the  
 10 whole metropolitan area relate to the  
 11 experience of the City of Detroit alone?  
 12 A Well, that's actually a very broad  
 13 question. And it entails -- in the first  
 14 instance, you could look at it in a very, very  
 15 narrow way, which would lead you to the  
 16 conclusion that Detroit is just a -- a portion,  
 17 I think it may be something like a fifth,  
 18 although that may be the -- in any way case, we  
 19 can say with assurance that Detroit itself, the  
 20 City, constitutes just a fraction of the  
 21 broader area, although a sizeable fraction.  
 22 The more pertinent way of looking at it,  
 23 from my point of view, would take into  
 24 consideration the economic interactions between  
 25 the areas immediately adjoining Detroit and the

1 City itself because, of course, the City is not  
 2 hermetically sealed from the adjoining  
 3 counties, from an economic point of view.  
 4 In fact, the implant model which we both,  
 5 ENY and I, seem to rely on to some extent is  
 6 useful in -- in its portrayal of those  
 7 interactions.  
 8 So in consequence, to answer your question  
 9 in the most meaningful way, I think it would  
 10 have to be linked to a more specific question  
 11 as to how an investment, for example, across  
 12 the border from Detroit, like an auto plant,  
 13 and there is one just straddling the border,  
 14 would influence Detroit's economy both directly  
 15 and indirectly through the purchase of  
 16 services, offer of employment opportunities and  
 17 so forth.  
 18 Q When one is looking at the growth of a  
 19 metropolitan statistical area, does that  
 20 necessarily mean that all the components of  
 21 that metropolitan statistical area are growing  
 22 at the same rate?  
 23 A Certainly not.  
 24 Q Why not?  
 25 A Well, one finds disparate growth rates

Page 78

1 even from one borough of Manhattan -- rather,  
 2 one borough of New York City to another.  
 3 There are probably are disparate growth rates  
 4 as between businesses in this building and  
 5 businesses in that building (indicating).

6 The issue -- the more fundamental issue  
 7 and -- nor -- again, let me reiterate, this is  
 8 one of many statistics which indicate recovery,  
 9 in my view, which in my view indicate recovery  
 10 in Detroit. Had the statistic been available  
 11 for the City itself, I would have used it.  
 12 It's not -- and -- and -- but it --  
 13 nevertheless, it has a bearing, in my view.

14 Q Okay. Historically, do you agree with me  
 15 that the growth has been faster in the suburbs  
 16 of Detroit than the City itself?

17 A Yes.

18 MR. STEWART: We've been on the record  
 19 about the 90 minutes. Let's take a break.

20 MR. SMITH: Sure.

21 THE VIDEOGRAPHER: The time is 10:31 a.m.  
 22 on August 1, 2014, and this completes Tape  
 23 Number 1.

24 (Whereupon, a short recess was taken.)

25 THE VIDEOGRAPHER: The time is 10:40 a.m.

Page 80

1 A Yes.  
 2 Q Okay. That was my question. Good.  
 3 Let's go, if we could, to Paragraph 24 or  
 4 we're just going to march through the report  
 5 page by page so that you know.

6 No. I'm sorry, Page 24. I apologize.  
 7 Paragraph 43. There's a reference there to  
 8 "PNC Bank's 'Detroit Market Outlook'?"

9 A Yes.

10 Q And that is, I think, Exhibit 1 to your  
 11 report.

12 My question is a narrow one, which is: Is  
 13 this an analysis of the City of Detroit proper  
 14 or the Detroit metropolitan statistical area?

15 A I believe it's the MSA.

16 Q Okay. Do you know the counties in the  
 17 MSA?

18 A I don't know that I can recite them. If I  
 19 had a map, it would help me.

20 Q Okay. If you would like, I have actually  
 21 broken them out, if you would like to see it,  
 22 because I was just going to ask you a couple of  
 23 questions.

24 MR. STEWART: Do we have a copy of that?  
 25 All right. We'll try to get that for you.

Page 79

1 on August 1, 2014, and this is Tape Number 2.  
 2 BY MR. STEWART:

3 Q Okay. If we could, Dr. Meyers, go back to  
 4 your report. I have a couple of questions just  
 5 moving along here.

6 First of all, just a question I have on  
 7 Paragraphs 22 -- Paragraph 22 has a table.  
 8 This is on Page 11. And you see under the  
 9 table there is a reference, in the third or  
 10 fourth row, it says: "Rejection of Initial  
 11 Methodology for Forecasting Wagering Taxes."

12 A Yes.

13 Q And there is the number of 121 million  
 14 less in revenue?

15 A Yes.

16 Q The next paragraph says "further," and  
 17 this is Paragraph 23, "had the City's  
 18 consultants not rejected their initial  
 19 methodology for forecasting wagering tax  
 20 revenues, and substituted a hard-coated set of  
 21 assumptions lacking in any discernable basis,  
 22 forecast revenue would have been well over  
 23 \$100 million greater."

24 A Yes.

25 Q Is that the same number, that 121?

Page 81

1 Q Do you know the number of counties?  
 2 A Approximately half a dozen, I believe.  
 3 Q Okay. Or the total population of all  
 4 those counties together?

5 A I believe it's about four times the --  
 6 well, I'd rather not speculate.

7 Q Please don't speculate. We can always go  
 8 look it up if we need to.

9 Do you know of something called SEMCOG,  
 10 Southeast Michigan Council of Governments?

11 A Oh, yes.

12 Q Have you looked at SEMCOG data as part of  
 13 your work?

14 A Yes, I have.

15 Q Did you find it reliable?

16 MR. SMITH: Objection to form.

17 A I'm unable to judge because I found  
 18 nothing describing their methodology.

19 Q Is it something you relied on in this  
 20 case?

21 A Nor did I find -- oh, I'm sorry.

22 Q I interrupted you.

23 A I wanted to answer complete.

24 In fact, I tried to assess it at some  
 25 point and found that there were no historicals

Page 82

1 against which I could compare previous  
 2 forecasts, so I was rather at a loss to assess  
 3 the reliability of their numbers.

4 Q Have you relied on any SEMCOG data in your  
 5 work here?

6 A No.

7 Q And is that the reason why, that you just  
 8 told me, that you --

9 A Yes.

10 Q Okay. Good. All right.

11 Let's go, if we could, to Page 34,  
 12 Paragraph 52. I'm looking at 52(a). That's at  
 13 the top of Page 34.

14 Do you have that in front of you?

15 A Oh, yes, I do. I'm sorry.

16 Q Okay. It mentions here that -- you say:  
 17 "Ms. Sallee relies on the FY 2014  
 18 reassessment."

19 What reassessment are you referring to  
 20 there?

21 A That is the reassessment completed by  
 22 Mr. Evanko earlier this year.

23 Q And did you find that reassessment  
 24 something that was reliable or not reliable?

25 A Well, unreliable. And, in fact, I have a

Page 84

1 say, including Plante Moran. So that's one  
 2 issue.

3 And I should note parenthetically that I  
 4 had requested, through Mr. Hackney, to obtain  
 5 that sales study, and as far as I know it still  
 6 hasn't been produced.

7 I view the sales study as defective, as  
 8 almost -- as almost certainly defective not  
 9 only for that reason, but also bearing in mind  
 10 that the reassessment at issue here was  
 11 completed by Mr. Evanko in a period of just a  
 12 few months, I believe.

13 We know from other testimony, including  
 14 his, that the City-wide reassessment planned  
 15 for later in the decade will -- will come at a  
 16 cost of at least a couple of million dollars  
 17 and take many years to complete. That fact in  
 18 itself should constitute some indication of the  
 19 rushed, and I would say, in my view, contrived  
 20 nature of the most recent reassessment.

21 Now, beyond that, we have the very  
 22 important issues of sampling,  
 23 representativeness. My goodness, a sales study  
 24 of the kind which presumably forms the basis of  
 25 this reassessment must fulfill many different

Page 83

1 section of the report immediately preceding the  
 2 one we are discussing now describing why I find  
 3 it unreliable.

4 Q Okay. So you are of the view that the  
 5 change to assessments done by Mr. Evanko is not  
 6 something you or -- you or anyone else could  
 7 rely upon?

8 A That's correct.

9 Q Okay. And you do understand Mr. Evanko is  
 10 the City assessor?

11 A Oh, yes.

12 Q And can you tell me why it is you don't  
 13 believe the opinion of the City assessor as  
 14 something you can rely upon?

15 A Several reasons.

16 Q Please go ahead and tell me.

17 MR. SMITH: Objection.

18 A In the first instance we know, based on  
 19 Plant Moran's assessment, so to speak, that the  
 20 sales study upon which that reassessment was  
 21 based included only a relatively minute number  
 22 of sales that were at arm's length. And, in  
 23 other words, overwhelmingly sales-related party  
 24 transactions. Not a reliable basis for  
 25 valuation as I believe the -- many sources will

Page 85

1 requirements in order for it to be reliable and  
 2 beyond the requirement that the sales be at  
 3 fair value, that is arm's length transactions  
 4 between unrelated parties.

5 As I think I might have mentioned earlier,  
 6 the study needs to be based on a sampling of  
 7 the housing stock that is a representative  
 8 sample as opposed, for example, to a sample  
 9 that is based predominantly, or that is overly  
 10 representative of foreclosure sales and sales  
 11 of properties that are either inherently  
 12 unrepresentative of the overall population of  
 13 properties or are sold under circumstances that  
 14 are not reflective of general market  
 15 transactions.

16 Q Do you -- did you finish your answer?

17 A There is -- in fact, I'm actually not  
 18 quite finished.

19 Q Please go on.

20 A I'm sorry?

21 Q I said please go ahead.

22 A Thank you.

23 I found Mr. Evanko's deposition to be very  
 24 informative and he came across as a quite  
 25 candid fellow, to me, and I formed the

Page 86

1 impression, based on that deposition and other  
 2 documents that I have seen, that he may have  
 3 been under some pressure to come up with a --  
 4 an assessment that is not compliant with the  
 5 various standards that obtain -- as should be  
 6 met to produce a reliable result.

7 Q Did you watch the videotape of his  
 8 deposition or just read the transcript?

9 A I read the transcript.

10 Q Did you read all of the transcript?

11 A Oh, yes.

12 Q Do you have an opinion on whether property  
 13 values in Detroit back before Mr. Evanko took  
 14 his actions, were overassessed or not  
 15 overassessed?

16 A Oh, yes, I do. I have data in my report  
 17 which, again, I should have cited it a moment  
 18 ago, also in my view brings into question the  
 19 accuracy of these reassessments.

20 Q My question is: Do you believe that the  
 21 property before he, Mr. Evanko, did anything,  
 22 is it your opinion that the properties in  
 23 Detroit were overassessed, under-assessed or  
 24 properly assessed?

25 MR. SMITH: Objection. Form.

Page 88

1 Q How many assessors are there in the  
 2 assessor's office?

3 A I do not know.

4 Q Who else did Plante Moran talk to?

5 A I do not know that.

6 Q Who from Plante Moran wrote this?

7 MR. SMITH: Objection. Form.

8 A I don't know.

9 Q This says it's a draft assessment. Do you  
 10 know what Plante Moran wrote in its final  
 11 assessment?

12 MR. SMITH: Objection. Form.

13 A No, I do not.

14 Q Okay. It says here: "Of the 12,000 sales  
 15 in the sales study, only 550 were arm's  
 16 length."

17 That's what you write here, correct?

18 A Correct.

19 Q What is your definition of an arm's length  
 20 transaction?

21 A A transaction between unrelated parties.

22 Q Is a foreclosure auction an arm's length  
 23 transaction?

24 A Foreclosure auction ought not to be an  
 25 arm's length transaction, in my view. It may

Page 87

1 A The evidence that I have seen and analyzed  
 2 and discussed in my report, indicates to me  
 3 that as of 2013, FY 2013 that is, on an overall  
 4 basis, aggregate taxable value in Detroit was  
 5 about what it should have been relative to  
 6 market values.

7 Q Okay. Let me just ask you a little bit  
 8 about Plante Moran before we go further.

9 Could you look at Page 20, Paragraph 28?

10 A Page 20? Page 20?

11 Q Page 20, Paragraph 28.

12 A Yes. Paragraph 38?

13 Q Is that the reference to Plante Moran you  
 14 mentioned a minute ago?

15 A Yes.

16 Q Okay. And you write: "As noted by Plante  
 17 Moran in its draft assessment of the City's  
 18 Assessing Division, 'One assessor estimates  
 19 that of the 12,000 sales, included in last  
 20 year's 2012 sales study, only 550 were arm's  
 21 length transactions.'"

22 Do you see that?

23 A Yes.

24 Q What was the name of that assessor?

25 A I don't know.

Page 89

1 conceivably be, but odds are it's not, given  
 2 the fact that the auction is being conducted by  
 3 the City and the foreclosure was on an  
 4 individual who, at least on a priority basis,  
 5 we would assume not have to a relationship with  
 6 the City government.

7 Q So you are saying it would or would not be  
 8 arm's length?

9 MR. SMITH: Objection. Form.

10 Q I am not sure I understood you.

11 A Would not.

12 Q Would not be arm's length?

13 A Yes.

14 Q So a foreclosure auction is not an arm's  
 15 length sale?

16 MR. SMITH: Asked and answered. Over  
 17 objection.

18 A I say again one can't assume that in no  
 19 instances whatsoever are such sales not arm's  
 20 length. I'm merely saying that in the  
 21 preponderance of cases it is improbable that  
 22 such sales would be non-arm's length sales.

23 Q Improbable that they would be non-arm's  
 24 length sales?

25 A Yes.

	Page 90	Page 92
1 Q Okay. Thank you.		1 A No, I do not.
2 By the way, do you know how the		2 Q Or who did it?
3 foreclosure process is handled for Detroit?		3 A I believe it was undertaken by a
4 A I do not know the specifics of how it is		4 contractor. And I did notice at one point, I
5 handled, other than to have read that there are		5 forget now, it was not performed by the City
6 very big lags as between delinquency and		6 but rather by a contractor located in another
7 foreclosure, a factor which asked to reduce		7 state, I believe.
8 collections, at least indirectly, insofar as it		8 Q Okay. So let's go back to Mr. Evanko.
9 allows people to continue to reside in their		9 You realize Mr. Evanko has spent a career in
10 homes for long periods of time without paying		10 Michigan as an assessor, correct?
11 their taxes.		11 A Yes, I do.
12 Q Okay. And so that impedes the City's		12 Q Do you believe that you have superior
13 ability to collect the taxes?		13 knowledge about the value of housing in Detroit
14 A Well, it's the county that collects the		14 to Mr. Evanko?
15 taxes, but it impedes the City's receipt of the		15 A Determination of the value of housing is
16 revenues associated with the taxes that have		16 an exercise that entails the application of
17 not been paid.		17 many different skills and areas of expertise in
18 Q Okay. Understood.		18 order to be done properly. I believe, in fact,
19 Let's go back to Paragraph 38. This is		19 that I have more expertise in some of those
20 this reference to the 12,000 sales. Do you		20 areas than he does.
21 know how many of those sales were foreclosure		21 Of course, I wouldn't question the -- his
22 sales?		22 having more knowledge of a -- in a sense of
23 A I do not.		23 history in assessing properties in Michigan,
24 Q Or how many were sales by banks?		24 goodness knows, than I do. I'm sure his
25 A I do not, but here again I would point out		25 judgment is, in many areas, quite sound.
	Page 91	Page 93
1 that I had requested the study and have not		1 This is an area in which I believe there
2 received it.		2 is a lapse and I do not fault him for that
3 Q Right.		3 lapse. In fact, nor is it my place to pass
4 Do you know what this assessor's		4 judgment on him. I think he was put in a
5 definition was of arm's length transaction?		5 difficult position and, as a consequence, had
6 MR. SMITH: Objection. Form.		6 to push through an appraisal that is, to
7 A Well, the term has a standard meaning. If		7 repeat, in my view, fundamentally unsound.
8 his deviates from that standard meaning, that		8 Q Could you name for me, if I ask you, the
9 is a fact of which I am unaware.		9 largest neighborhoods in Detroit?
10 Q Do you know one way or the other what this		10 A Not at the moment, no.
11 person's definition is of arm's length sale?		11 Q Could you name for me, if I ask you, the
12 MR. SMITH: Objection.		12 neighborhoods in Detroit that have the highest
13 A I am assuming that it is the standard		13 average property values?
14 definition.		14 A Not at the moment.
15 Q Okay.		15 Q Or the lowest?
16 A In fact, if he is an assessor and does not		16 A Not at the moment.
17 know the standard definition, I would very much		17 Q Or where they had the greatest blight?
18 question his competence.		18 MR. SMITH: Objection. Form.
19 Q The 12,000 sales referred to, do you know		19 A No. I've seen that data and I've seen
20 what years those sales occurred in?		20 related maps and the blight task force website
21 A My impression is that those sales extend		21 and so forth. I just simply cannot recite
22 backward about two years, but I could be wrong		22 those names right now.
23 about that.		23 Q Have you gotten in a car and driven around
24 Q Okay. Do you know when the 2012 sales		24 Detroit to look at the various neighborhoods?
25 study referred to here was done?		25 A No, I have not.

		Page 94	Page 96
1	Q	Let me ask you to look at Page 25. You have a chart here, Chart 9.	
3		Do you see Chart 9?	
4	A	In a moment. Yes.	
5	Q	It shows a drop in the average price of homes; does it not?	
7	A	Yes, it does.	
8	Q	And your chart has the high price occurring, it looks to be around 2002 or 2003, at close to \$100,000?	
11	A	Yes.	
12	Q	And the low price about 2009 at -- looks to be about \$18,000?	
14	A	Yes.	
15	Q	So that's, in terms of percentage drop, how much did the average price of homes drop in those years?	
18	A	Average price of homes sold dropped clearly by roughly 80 percent.	
20	Q	In other words -- okay.	
21		And you're telling me this is not representative of decline in the general value of property in Detroit?	
24	A	Absolutely.	
25	Q	Absolutely?	
		Page 95	Page 97
1	A	Absolutely not. I'm telling you that it is not.	
3	Q	Okay. So despite the drop in the -- these houses that were sold, it is your opinion that does not indicate a drop in the average value of a house in Detroit?	
7		MR. SMITH: Objection. Form.	
8	A	I'm sorry. Which years are we comparing here?	
10	Q	The peak year to the lowest year.	
11	A	'03 to '09?	
12	Q	Uhm-hum.	
13	A	Could I use a calculator?	
14	Q	Yes.	
15	A	Thanks. Right. The more accurate figure would be a decline of about 40 percent over that period, as is indicated by the Case-Schiller index graft in Chart 13.	
19	Q	Case-Schiller is an index for the metropolitan statistical area; is it not?	
21	A	Indeed it is.	
22	Q	That is the number of counties above, not just Detroit; is that correct?	
24	A	Certainly.	
25	Q	Okay. So I'm asking you just about	
		Detroit.	
	2	A And I'm responding just about Detroit.	
	3	Q So you're saying Detroit the price, as you calculated, drop was 40 percent?	
	5	A In my view. The more reliable indicator of the change in price within the City of Detroit is the Case-Schiller index for the larger area, notwithstanding that it is for a larger area.	
	10	MR. STEWART: I'm going to have the Reporter -- we're going to come back to this, but just in the meantime I'll have the Reporter mark as Exhibit 2 this document. Once she has marked it, I will describe for the record what it is.	
	16	(Whereupon, the aforementioned document re: Case-Schiller Index, was marked as Meyers Exhibit 2 for identification as of this date by the reporter.)	
	20	BY MR. STEWART:	
	21	Q Dr. Meyers, the Reporter has placed before you Exhibit 2, which is two pages. The back page is a list of Michigan population by county, but the front --	
	25	MR. SMITH: I didn't mean to interrupt	
	1	you, but could I get a copy?	
	2	MR. STEWART: I'm sorry. Where's his	
	3	copy?	
	4	MR. SMITH: Sorry.	
	5	MR. STEWART: I apologize.	
	6	MR. SMITH: Thanks.	
	7	BY MR. STEWART:	
	8	Q The front page is a list of the municipalities and/or counties in the Case-Schiller index.	
	11	Do you have it before you?	
	12	A Oh, I do, yeah.	
	13	Q Is this accurate, so far as you can tell?	
	14	A I have no reason to question it.	
	15	Q What percentage of population in the Case-Schiller Detroit MSA index actually lives in Detroit?	
	18	A 15.48 percent.	
	19	Q That's what, less than 1/7, 1/6?	
	20	A I'll take your word on that.	
	21	Q Okay. Whatever it is, it is.	
	22	Now, meanwhile, Macomb County and Oakland County between them have about half of all of the people who live in the metropolitan	
	23	statistical area?	
	24		
	25		

Page 98

1 A That's correct.  
 2 Q And if you add Wayne County outside of  
 3 Detroit, you get to three-quarters?  
 4 A Yes.  
 5 Q Okay. You would agree with me that one  
 6 reason people live in the suburbs is because  
 7 they do not wish to live in the City?  
 8 MR. SMITH: Objection. Form.  
 9 A By definition.  
 10 Q And you would agree with me that an index  
 11 that only 15.5 percent of which relates to  
 12 Detroit is not as good an index of events in  
 13 Detroit as one that would be confined to the  
 14 City itself?  
 15 MR. SMITH: Objection. Form.  
 16 A I would agree with that.  
 17 Q Okay. Tell me, if you could, why you  
 18 believe it's valid to rely on the Case-Schiller  
 19 index when the City of Detroit comprises only  
 20 15.5 percent of the population of the areas  
 21 being covered by the Case-Schiller index.  
 22 A Well, as I indicated a moment ago, I  
 23 believe that index is inherently a far better  
 24 measure of trends in prices -- in home prices,  
 25 than our average sales prices. To be sure, we

Page 99

1 would expect to see some variation as among  
 2 counties in the behavior of that index, if we  
 3 had that index on a county by county basis. So  
 4 for that matter, on a Detroit versus  
 5 non-Detroit basis for the SMSA.  
 6 However -- however, a priori, I have seen  
 7 no evidence -- certainly no compelling evidence  
 8 to indicate that the increase in valuations  
 9 over the period in which housing value rose  
 10 greatly in the early part of the last decade --  
 11 early to mid part of the last decade, was not  
 12 echoed, so to speak, in fundamentally the same  
 13 way as between the City of Detroit and the  
 14 surrounding areas.  
 15 Nor for that matter, the subsequent  
 16 downturn and the subsequent upturn in prices in  
 17 both regions.  
 18 You see the pattern as indicated in my  
 19 Chart 13 is a -- the pattern I'm referring to  
 20 now more specifically is the Detroit MSA home  
 21 price index, that the behavior of that -- of  
 22 that index parallels the behavior of similar  
 23 indices and the behavior of market prices for  
 24 homes in many areas of the country.  
 25 Indeed, it's not dissimilar from the

Page 100

1 pattern in the trends, rather in commercial and  
 2 industrial property valuations, as well.  
 3 Q Doesn't Chart 13 compare the MSA home  
 4 price index with the Detroit real property  
 5 taxable value?  
 6 A Yes. But I'm, at the moment, referring  
 7 simply to the home price index line, and I'm  
 8 making the point that home price index, if you  
 9 were to do the same exercise with respect to  
 10 other cities and other states, for that matter,  
 11 you would find a very similar pattern or trend  
 12 which suggests that that trend is pervasive,  
 13 that is, that other things equal.  
 14 If it's replicated in a thousand different  
 15 jurisdictions, to one degree or another, it was  
 16 also replicated in Detroit.  
 17 Q Can you think of reasons why Detroit might  
 18 be different than other jurisdictions?  
 19 MR. SMITH: Objection. Form.  
 20 A Well, of course Detroit is different from  
 21 other jurisdictions, but are those differences  
 22 of a kind that would lead me to conclude that  
 23 the trend in home prices in the City deviated  
 24 markedly from the trend in the Schiller index  
 25 for the larger geographic area is not -- I'm --

Page 101

1 I am sorry, I didn't complete the sentence.  
 2 Q Please go ahead.  
 3 A I simply want to say, as I did earlier,  
 4 that the trend that we see here as reflected in  
 5 the Detroit MSA home price index is a common  
 6 one, and we also do see it replicated in my  
 7 Chart 13 -- not replicated, but followed in  
 8 broad terms in Detroit's real property taxable  
 9 value.  
 10 So assessments are taking place within the  
 11 City over those years that in their general  
 12 tendency are similar to assessments that are  
 13 being taken -- being made elsewhere and it's  
 14 true, as well, of subsequent declines.  
 15 Q So you're saying when there was a decline  
 16 in the Case-Schiller index, there should be a  
 17 decline in the assessed value of property in  
 18 Detroit?  
 19 A No, that isn't what I'm saying. What I'm  
 20 saying is that over the period of several  
 21 years, if movements in those two variables  
 22 converged as they do as shown in my exhibit,  
 23 Chart 13, I have reason to believe that market  
 24 values are not substantially out of line with  
 25 assessments.

<p style="text-align: right;">Page 102</p> <p>1 Q So you're saying Chart 13 would tell you 2 that based on the Case-Schiller Detroit MSA 3 home price index, Detroit properties are not 4 overassessed?</p> <p>5 MR. SMITH: Objection.</p> <p>6 Q Is that your conclusion?</p> <p>7 A My conclusion is that this chart 8 constitutes evidence indicating that properties 9 in the City were not overassessed as of FY 213.</p> <p>10 Q Thank you.</p> <p>11 A By the way, another element that indicates 12 that is the unitary value assigned by the 13 equalization group in the state in respect to 14 assessments in the City versus assessments 15 elsewhere in the state for that year.</p> <p>16 Q Who is responsible for that year for the 17 unitary assessments for Wayne County, Michigan?</p> <p>18 A For the county?</p> <p>19 Q In the year 2013.</p> <p>20 A I don't recall.</p> <p>21 Q Okay. Look at Exhibit 2, if you could. 22 It's the one I just handed you. It's over 23 there on your right. It's the one that lists 24 all the cities and counties in the 25 Case-Schiller index.</p>	<p style="text-align: right;">Page 104</p> <p>1 However, that would have been true in 2001 2 as well, and so only if one saw a substantial 3 increase in the ratio of blighted to 4 non-blighted properties, over the 10 odd years 5 since, could one with any confidence conclude 6 that taxable value in the aggregate should be 7 lower for such a reason.</p> <p>8 Q And before I leave this, just to make sure 9 I understand you, it is your opinion that in 10 determining the change in value of properties 11 in Detroit, it is proper to compare those to 12 these other counties that the Case-Schiller 13 index embraces?</p> <p>14 MR. SMITH: Objection.</p> <p>15 A It is proper to consider the trend across 16 these several counties in the Case-Schiller 17 index in evaluating the accuracy of assessments 18 in Detroit in FY2013.</p> <p>19 Q When you say "trend," do you mean a trend 20 that would lead you to be able to make 21 mathematical predictions?</p> <p>22 A I'm not quite sure what you mean by 23 "mathematical predictions."</p> <p>24 Q Could you take the Case-Schiller index and 25 from it, just looking at it, determine what a</p>
<p style="text-align: right;">Page 103</p> <p>1 A Yes.</p> <p>2 Q Do you know that percentage -- do you know 3 the number of blighted properties in Detroit?</p> <p>4 A Well, according to the blight -- I forget 5 the name exactly, the committee, the blight 6 task force, pardon me, about 40,000.</p> <p>7 Q What percentage of all housing in Detroit 8 is blighted?</p> <p>9 A Well, if their estimate is accurate, that 10 would represent something like, roughly 11 speaking, 15 percent.</p> <p>12 Q What percentage is blighted in Lapeer 13 County, if you know?</p> <p>14 A I do not know.</p> <p>15 Q Or Livingston County?</p> <p>16 A I do not know.</p> <p>17 Q Or any of these other counties?</p> <p>18 A I do not know, but bear this in mind 19 because it is a very important consideration, 20 what we're looking at -- what we're considering 21 here are price trends. To be sure, one can 22 assume with some confidence that the relative 23 number of blighted properties in the City of 24 Detroit is greater than it is in the 25 surrounding counties.</p>	<p style="text-align: right;">Page 105</p> <p>1 Detroit property's change in value would be?</p> <p>2 A Not in any given year or month, of course 3 not. However, as -- again, as I indicated 4 earlier, if you look, as I do, at the behavior 5 of the relevant indices over a much longer 6 period of time, I believe that behavior 7 provides evidence of relevance to determining 8 whether or not assessments as of 2013 were 9 accurate. Again, in relative terms.</p> <p>10 Q Sure. Sure. So let's go, if we could -- 11 let's go back to your report, and I think I've 12 been asking you about Paragraph 52 and 52(b).</p> <p>13 You talk about Ms. Sallee relying on 14 average home selling prices in estimating the 15 disparity between market value of the housing 16 stock and residential taxable value.</p> <p>17 Do you see where you write about that?</p> <p>18 It's on Page 34.</p> <p>19 A We're in Paragraph 52 now, correct?</p> <p>20 Q 52(b). In that subparagraph.</p> <p>21 A Oh, I'm sorry.</p> <p>22 Q It's a carryover.</p> <p>23 A Yes.</p> <p>24 Q Okay. And is it your opinion that it is 25 better to rely on the Case-Schiller index to</p>

Page 106

1 determine assessment -- proper assessment  
 2 values than it is to rely on average home sale  
 3 prices?  
 4 A When used as I used the Case-Schiller  
 5 data, yes, I do. And I should note that  
 6 Ms. Sallee also makes use of the Case-Schiller  
 7 data in her analysis, if not fully use.  
 8 Q Okay. In the next paragraph you say:  
 9 "Disregarding an apparent error in the related  
 10 narrative" -- and I just have a question. What  
 11 do you mean when you say "error in the related  
 12 narrative"?  
 13 A Oh, my. This is a citation to, let me  
 14 see, which page of her report. There is a page  
 15 in her report which I found almost impossible  
 16 to follow analytically, and I think that was  
 17 just an artifact of the way it was written.  
 18 I'm not even sure that she herself wrote it.  
 19 Point being, I had to think about what she  
 20 said quite a lot in order to discern what I  
 21 construed to have been her method, because the  
 22 language leads one in a different direction.  
 23 Q Okay. Did you read her deposition where  
 24 she was questioned about those things?  
 25 A I did read her deposition. I don't recall

Page 108

1 talk about this is on commercial taxable value.  
 2 Do you mean taxable value of commercial  
 3 properties or something different than that?  
 4 A Commercial properties.  
 5 Q You say: "She's improperly using a  
 6 recession impacted period as the basis for  
 7 forecasting values in a period of economic  
 8 recovery."  
 9 Do you see where you write that?  
 10 A Yes.  
 11 Q Okay. Now, is the recession impacted  
 12 period to be ignored in forecasting values?  
 13 A No. Of course not, but it's to be  
 14 assigned appropriate weight based on a broader  
 15 perspective that informs us as to what happens  
 16 typically when the recession is over.  
 17 Q Okay. And what period of time would be  
 18 the appropriate period of time then to correct  
 19 what you see as an error in Ms. Sallee's work?  
 20 A I believe that to gain adequate  
 21 perspective on the relevant trends, one would  
 22 have to look back at many years, because cycles  
 23 tend to manifest themselves over several years,  
 24 and in this case, as we all know, the recovery  
 25 from the recession, while nominally having

Page 107

1 her statements in respect to this.  
 2 Q All right. But just before I move on --  
 3 well, let me just move on.  
 4 52(e), you refer to something from  
 5 Mr. Evanko's deposition that used the word  
 6 "ridiculous."  
 7 Do you see where you've written that?  
 8 A Yes, I do.  
 9 Q And you say here: "Mr. Evanko estimates  
 10 the effect at .7 percent."  
 11 Do you see that?  
 12 A Yes, I do.  
 13 Q What effect is it that he estimates at  
 14 .7 percent?  
 15 A Loss in revenue, I believe.  
 16 Q What kind of revenue?  
 17 A In this instance, it would be revenue  
 18 associated with the personal business -- pardon  
 19 me, with the business personal property tax.  
 20 Q And did you compare that to the part of  
 21 the Sallee report Mr. Evanko had before him  
 22 when he testified?  
 23 A I don't know what he had before him when  
 24 he testified.  
 25 Q Okay. All right. And then in (f) you

Page 109

1 begun a couple years ago, is slow and gradual.  
 2 Q When you say you would have to go back  
 3 many years, what's the rule of thumb an  
 4 economist would use?  
 5 A There is no rule of thumb but, you know,  
 6 allow me to point out that I studied business  
 7 cycle theory under one of the pioneers, Arthur  
 8 Burns, former Federal Reserve Chairman.  
 9 Q Famous guy.  
 10 A Yeah. And he typically would put very  
 11 lengthy diagrams on the blackboard. They all  
 12 did, everyone in Columbia at that time. But  
 13 depicting the business cycle, turning points  
 14 and whatnot, and those diagrams would typically  
 15 span decades, because in order to gain  
 16 perspective on the business cycle you need to  
 17 look back a great many years.  
 18 The cycles vary in terms of magnitude,  
 19 amplitude and length, and truly to get adequate  
 20 perspective on the role of the cycle and  
 21 influencing, among other things, real estate  
 22 values, you need a panoramic screen as opposed  
 23 to a -- the lens of a microscope, so to speak,  
 24 focusing on just a few year period.  
 25 Q Okay. Let me ask you to jump forward to

<p style="text-align: right;">Page 110</p> <p>1 Page 44, Paragraph 63.</p> <p>2 Do you see there you've written: "In</p> <p>3 addition, the City has an agreement in concept</p> <p>4 with the state to combine collection of City</p> <p>5 income taxes with the collection of State</p> <p>6 income taxes, which will likely both increase</p> <p>7 revenues and decrease costs. Under this</p> <p>8 scenario, the State will collect and enforce</p> <p>9 the City income tax, which should reduce costs</p> <p>10 for the City."</p> <p>11 Is that the reference to piggybacking you</p> <p>12 made earlier?</p> <p>13 A Yes.</p> <p>14 Q Okay. And tell me why it would increase</p> <p>15 revenues.</p> <p>16 A Well, as I understand it, at present, a</p> <p>17 very large share of reverse commuters do not</p> <p>18 pay the Detroit City income tax. It would be</p> <p>19 much harder for them to avoid payment if they</p> <p>20 were obligated to make such payments along with</p> <p>21 their state income tax forms.</p> <p>22 We have -- if you live in New York, you</p> <p>23 know, we have a similar arrangement here. The</p> <p>24 state in general being much larger and having</p> <p>25 more employees it could devote to the task, is</p>	<p style="text-align: right;">Page 112</p> <p>1 MR. SMITH: Objection. Form.</p> <p>2 A I would agree with you but for the fact</p> <p>3 that I am unsure as to whether the constitution</p> <p>4 determines the formula that is employed.</p> <p>5 Q Okay. Fair point.</p> <p>6 Now, revenue sharing has dropped in recent</p> <p>7 years, correct?</p> <p>8 A There is a long-term drop in revenue</p> <p>9 sharing, absolutely.</p> <p>10 Q You would agree with me that most of that</p> <p>11 drop has been in what we call EVIP?</p> <p>12 A I don't know about that.</p> <p>13 Q What have you done to analyze that, if</p> <p>14 anything?</p> <p>15 A Well, I have not attempted to apportion</p> <p>16 the drop as between the two components. I</p> <p>17 have, however, noted the -- the drop, long-term</p> <p>18 issue, really, not just the recent past.</p> <p>19 Q What is the role, if any, of the Michigan</p> <p>20 state legislature when it comes to deciding the</p> <p>21 amount of the EVIP gained?</p> <p>22 A I believe it has discretion in that area.</p> <p>23 Q Okay. Discretion in what sense?</p> <p>24 A That it can increase such payments in the</p> <p>25 aggregate. It may have discretion as to the</p>
<p style="text-align: right;">Page 111</p> <p>1 better able to enforce taxes than as a City and</p> <p>2 in this case all the more so.</p> <p>3 Q Let's move on. I'm going to ask you about</p> <p>4 revenue sharing. Okay?</p> <p>5 And you know, of course, there's two</p> <p>6 elements of revenue sharing, constitutional and</p> <p>7 something called the EVIP?</p> <p>8 A Yes.</p> <p>9 Q Which I think is Economic Vitality</p> <p>10 Incentive Program, give or take a word or two?</p> <p>11 A Right.</p> <p>12 Q No issue about the constitutional revenue</p> <p>13 sharing that's being done on a constitutional</p> <p>14 formula?</p> <p>15 MR. SMITH: Objection. Form.</p> <p>16 A What do you mean by "no issue"?</p> <p>17 Q Well, there is no question of that being</p> <p>18 taken away from the City.</p> <p>19 MR. SMITH: Objection. Form.</p> <p>20 A Well, I -- I don't want to appear to</p> <p>21 quibble but, you know, no law is unchangeable.</p> <p>22 Q I understand. Okay. But short of a</p> <p>23 change in the state constitution, that -- that</p> <p>24 portion of the revenue sharing would stay as it</p> <p>25 is, correct?</p>	<p style="text-align: right;">Page 113</p> <p>1 allocation of the payments as between cities.</p> <p>2 I'm not sure.</p> <p>3 Q Do you know of any means of predicting, as</p> <p>4 we sit here today, what the Michigan</p> <p>5 legislature will do in the coming years when it</p> <p>6 comes to EVIP?</p> <p>7 A Well, no. And this is an issue, you see,</p> <p>8 of somewhat broader significance, in my view,</p> <p>9 because it is yet another source of variability</p> <p>10 in any long-term forecast. Uncertainty in</p> <p>11 respect to those amounts contributes to</p> <p>12 uncertainty in respect to the City's cash flow</p> <p>13 forecast, generally, and in this area</p> <p>14 specifically we have witnessed a revision of</p> <p>15 the City's estimate of revenue sharing in the</p> <p>16 coming year relative to what it had estimated</p> <p>17 just months ago because of the Governor's</p> <p>18 decision -- the decision of the Governor and</p> <p>19 the legislature, I would assume, to increase</p> <p>20 payouts.</p> <p>21 And if the City's forecast just a year</p> <p>22 ahead is proven to be inaccurate, one can only</p> <p>23 imagine what its forecast of those amounts 10</p> <p>24 years hence, five years hence, might -- the</p> <p>25 extent to which those forecasts might be at</p>

Page 114

1 variance with reality.

2 Q Is that because small changes in  
3 assumptions at the beginning of a period become  
4 larger as the period goes on?

5 A No. Although that, of course, is an  
6 important consideration in some instances. The  
7 compounding effect, so to speak. But here it's  
8 merely a matter of the variability in state  
9 policy on a going forward basis.

10 Q That introduces an element of uncertainty,  
11 I assume.

12 A Yes.

13 Q Fair to say, to be honest, the same is  
14 true with the City of Detroit's own politics?

15 A Oh, certainly.

16 Q There is a mayor now and the emergency  
17 manager will soon be gone?

18 A Indeed.

19 Q And I think you speak about that in your  
20 report; do you not?

21 A Yes.

22 Q And what -- what is your -- what effect do  
23 you see that -- what impact do you see that  
24 having?

25 A It's an impact which cannot be predicted

Page 116

1 Q Okay. Are these nominal dollars or real  
2 dollars?

3 A These are nominal dollars.

4 Q Okay. So -- so the dollar numbers on the  
5 side have been kind of reverse adjusted for  
6 inflation in a sense?

7 A No, no. Nominal dollars are not adjusted  
8 for inflation.

9 Q Okay. So if I, in other words, were to go  
10 to the City's CAFR for a given year, let's just  
11 look at the property tax line, the line that is  
12 red.

13 A Yes.

14 Q And look at that number as reported in the  
15 CAFR, it would not be -- let's make it easy.  
16 It looks like in the Year 2000 the property tax  
17 line appears to be about 150 million, give or  
18 take a little bit.

19 Okay?

20 A Yes.

21 Q Okay. If I went and looked at the CAFR,  
22 it would not say 150 million, because I would  
23 have to turn that CAFR number into nominal  
24 dollars?

25 A No, no. It's the reverse. Nominal

Page 115

1 and this, of course, is another reason why I  
2 believe it to be appropriate in this case to  
3 offer a range of values for revenues and costs,  
4 future values, rather than proffering a point  
5 estimate so one could state with assurance that  
6 in 2019, for example, property tax revenue  
7 will, for example, be \$97 million or whatever  
8 as the case may be.

9 Q Sure. Whatever it is. Okay.

10 Let's, if we could -- let me ask you about  
11 some of the charts. What I'm going to do is,  
12 frankly, go through the charts one by one and  
13 then what we may do is also refer to some of  
14 the narrative as well.

15 So I'm just going to start with Chart 1  
16 and so tell me -- Chart 1 is on Page 13.

17 Do you have Chart 1 in front of you,  
18 Dr. Meyers?

19 A Yes, I do.

20 Q Okay. Now, first of all, where did your  
21 data come from for Chart 1?

22 A Well, the source is cited at the foot of  
23 the chart, from the City's comprehensive annual  
24 financial reports and also the document POA and  
25 so forth.

Page 117

1 dollars -- should you wish to turn nominal  
2 dollars into real or constant dollar-dollars,  
3 you would have to inflate or deflate as the  
4 case may be.

5 These are in current dollars, meaning that  
6 in the Year 2000 \$150,000,000 were received by  
7 the treasury.

8 Q Okay. All right. By the way, the years  
9 at the bottom, those are fiscal years?

10 A Oh, yes. Yes.

11 Q Okay. Was this chart derived from a  
12 spreadsheet of some sort?

13 A I'm sure.

14 Q Do you know if that spreadsheet has been  
15 produced to us?

16 A It should have been, yes.

17 Q Well, let me ask you a question. As we  
18 look at this, in 1980 you've got these three  
19 lines, the blue one is municipal income tax,  
20 the green one is shared state tax, and the red  
21 one is property tax, correct?

22 A Yes.

23 Q And the shared state tax, that is revenue  
24 sharing?

25 A Yes.

Page 118

1 Q Okay. Do these lines move in parallel  
 2 between 1980 and 2000?  
 3 A Approximately. I mean, of course the  
 4 growth in property tax revenue is less. But  
 5 the general trend is upward in all three cases.  
 6 Q But the income tax increases from about  
 7 130 million to about 375 million?  
 8 A Yes.  
 9 Q Okay. That has about -- it about triples?  
 10 A Well, not tripling. I would say it's more  
 11 like a 250 percent increase or something like  
 12 that.  
 13 Q And the property tax goes from 100 to  
 14 150 million?  
 15 A Well, what years are referring to?  
 16 Q 1980 to the Year 2000.  
 17 A Yes, to 2000, yes.  
 18 Q And then at later years the blue and green  
 19 lines fall, correct?  
 20 A Yes.  
 21 Q But in those years, by and large, the red  
 22 line continues to go up?  
 23 A Yes.  
 24 Q Okay. I noticed, by the way, there is  
 25 what looks like a spike in revenues, property

Page 119

1 tax revenues, in about the Year 2011 or so.  
 2 Do you see that spike there?  
 3 A Oh, yes. Yeah.  
 4 Q Do you know what caused that?  
 5 A Yeah. It's my understanding that based on  
 6 what the City has submitted and, in fact, it  
 7 was in response to one of my questions that  
 8 they submitted it, a document indicating  
 9 that -- that reflects collections for earlier  
 10 years that were deferred, as it were, and that  
 11 on an accrual basis really should be -- have  
 12 been reflected in prior years.  
 13 Q Have you attempted to prepare a version of  
 14 this chart where the property tax line, in  
 15 other words, the red line, has been changed to  
 16 reflect the actual years in which the property  
 17 tax accrued as opposed to the year in which the  
 18 property tax --  
 19 A Oh, no.  
 20 Q Why not?  
 21 A I didn't see it as having any immediate  
 22 relevance. Here, again, is the need for a  
 23 somewhat larger answer. In the first instance,  
 24 what matters from a cash flow point of view is  
 25 what you collect, not what you're owed.

Page 120

1 In the second, to be sure, lags in  
 2 collection go to issues of delinquency and  
 3 adequacy of enforcement and so on. So it's by  
 4 no means an irrelevancy, but within the four  
 5 corners of the analysis, was performing here, I  
 6 did not see it as germane.  
 7 Q Did you actually perform two different  
 8 analyses to see how they differed?  
 9 A No.  
 10 Q Okay. Now, as we look at -- you are aware  
 11 that the City just released its 2014 -- I'm  
 12 sorry, its 2013 -- I'm sorry. Withdraw the  
 13 whole question.  
 14 The City just released its audited fiscal  
 15 Year 2014 comprehensive annual financial  
 16 reports?  
 17 A Yes, by KPMG. One of my former employers.  
 18 Q Oh, really?  
 19 A Yes, my group at FTI migrated from KPMG in  
 20 2003. They acquired the dispute group of KPMG,  
 21 or half of it, in that year.  
 22 Q Okay. Did you take a look to see how the  
 23 actual property tax revenues for that for  
 24 fiscal 2014 compared with what you have in your  
 25 chart?

Page 121

1 A I have not looked at that. I only  
 2 recently came to acquire that recent report.  
 3 All I had to work with at this -- at the point  
 4 at which I wrote this were first three quarters  
 5 actual.  
 6 Q If you did change your -- change this  
 7 chart to reflect the actuals, would it have  
 8 effect on any of the projected numbers in the  
 9 chart?  
 10 A Well, these are the City's projections in  
 11 this chart, not mine.  
 12 Q Okay.  
 13 A So you would have to pose that question to  
 14 them, I think.  
 15 Q Okay. All right. Let's go, if we could,  
 16 to Chart No. 3.  
 17 Can you tell me what Chart No. 3 --  
 18 actually, I'm sorry. Let's go to Chart 2.  
 19 Chart 1 begins in the year 1980, but Chart  
 20 2 is the year 1993. Can you tell me why there  
 21 were different beginning points for those two  
 22 charts?  
 23 A Well, there are a couple of possible  
 24 reasons for that. The first instance, I don't  
 25 know that I saw a need to equate the periods in

Page 122

1 the two charts, and the second, it's possible  
 2 that the data reflected in Chart 2 did not  
 3 extend back any further than 1993. As I sit  
 4 here, I'm not sure whether or not that's the  
 5 case.

6 Q Okay. If you're not sure, you can just  
 7 tell me. This isn't a memory -- you know what  
 8 I'm saying? I'm not asking you to speculate.  
 9 If you don't know or if you do know, whatever  
 10 you wish to say is great.

11 Let's look at Chart 3, if we could. What  
 12 does Chart 3 purport to show us?

13 A Well, Chart 3, I think, is informative in  
 14 many respects. First, it shows us that up  
 15 until 2005 or, rather, 2006 -- pardon me. It's  
 16 hard to do this.

17 Q I meant to get rulers. We don't have  
 18 them.

19 A I know. Well, up until about 2008, give  
 20 or take, property tax revenue for the City was  
 21 moving pari-passu with property taxable value,  
 22 as one would expect. But then, as is clear  
 23 here, beginning at about that time, what I call  
 24 a payment gap opens up and the property taxable  
 25 values continue to increase up to a point.

Page 123

1 Revenue falls off quite significantly.

2 That fact in itself is informative because  
 3 it tells us that, first of all, the reduction  
 4 in property tax revenue is not due to a  
 5 corresponding reduction in property taxable  
 6 value. Other factors are at work. And those  
 7 factors may include both the effects of the  
 8 recession on ability to pay and a erosion in  
 9 the City's ability to effectively enforce the  
 10 property tax. And there are certainly  
 11 substantial evidence for the second.

12 Both factors, of course, are transitory.  
 13 In the case of the City's inability to collect,  
 14 one hopes that's transitory and there is  
 15 evidence that it will be given efforts underway  
 16 to rectify the problems associated with  
 17 inadequate collection.

18 And by the way, now I know I'm going to  
 19 get diverted and then I'm not going to remember  
 20 what this question was, but notwithstanding  
 21 that, I do --

22 Q I can think of more questions.

23 A I'm sure you can. We could go on here God  
 24 knows how long.

25 But in any case, you know, it's more than

Page 124

1 a collection problem. I prefer to refer to it  
 2 as an enforcement problem because of the many  
 3 links in the chain. You know, in the first  
 4 instance you have to identify the property that  
 5 has value and that may not happen. In the  
 6 second instance, you have to assess it  
 7 properly, which may or may not happen. Assign  
 8 a correct value to it, that is.

9 In the third instance, that assessment  
 10 must be translated into a bill, in this case by  
 11 the treasury, and as we know, those bills  
 12 sometimes aren't sent out at all or they are  
 13 sent out to the wrong person.

14 In addition to that, and overlaying all of  
 15 that, you have the inability of the assessor's  
 16 office to contest claims of improper  
 17 valuations, and so if they don't show up at the  
 18 hearing, the applicant prevails, property taxes  
 19 are lowered -- assessments, rather, and  
 20 property taxes along with them lowered  
 21 improperly and everyone has to live with the  
 22 result on a going forward basis.

23 Other individuals learn of the triumph of  
 24 this hypothetical person before the tax  
 25 tribunal and next thing you know they show up

Page 125

1 at the next tribunal having hired an appraiser  
 2 who agrees with them that their house is worth  
 3 a lot less than its current appraised value.  
 4 That is not contested and so on and so forth.

5 I don't know that I've even listed all the  
 6 of the things that can go wrong, but the point  
 7 being that this payment gap, as I call it,  
 8 opening up in the latter part of the last  
 9 decade and continuing to the present is likely  
 10 due both to such factors, as I've just  
 11 discussed, and to the lingering effect of the  
 12 recession.

13 Q Okay.

14 A So diagnostically -- shall I stop?

15 Q No. Please go.

16 A Because the chart tells us more.

17 Q Okay. Go ahead.

18 A All right. So the chart has some  
 19 diagnostic value in that sense. The chart  
 20 further tells us that implicit in the City's  
 21 property tax revenue forecast is a 50 percent  
 22 decrease; again, assuming no material  
 23 improvement in collections, there's 50 percent  
 24 decrease in taxable value in 2019 or so  
 25 relative to taxable values in 2013, a fact

<p style="text-align: right;">Page 126</p> <p>1 which I believe Ms. Sallee acknowledges.</p> <p>2 You take that 50 percent reduction on top</p> <p>3 of what has been a reduction of, I think,</p> <p>4 something like 35 percent over the past several</p> <p>5 years, and as I indicated in my report, you are</p> <p>6 lopping off most of the value of the City, in</p> <p>7 essence. An implausible scenario, in my view.</p> <p>8 So the chart tell us that and perhaps</p> <p>9 other things, as well.</p> <p>10 Q Okay. One thing the chart purports to</p> <p>11 show is that property tax revenue moves in</p> <p>12 parallel with -- let me just withdraw that.</p> <p>13 Okay. That's fine. Let's look, if we</p> <p>14 could, Dr. Meyers, at Page 18, Chart 4.</p> <p>15 That's a chart about the employment in the</p> <p>16 City of Detroit?</p> <p>17 A Yes.</p> <p>18 Q Okay. And it shows from 19 -- 1990, a</p> <p>19 little less than 340,000 people were employed,</p> <p>20 in January of this year a little more than</p> <p>21 280,000 people are employed, correct?</p> <p>22 A Yes.</p> <p>23 Q What's the mathematical correlation</p> <p>24 between employment and home ownership?</p> <p>25 A The correlation between employment and</p>	<p style="text-align: right;">Page 128</p> <p>1 either that the City forecast is not monthly or</p> <p>2 that the City -- and/or that the City forecast</p> <p>3 is on a fiscal year basis, whereas, the lines</p> <p>4 here, the other series, is not. It's monthly,</p> <p>5 so fiscal or calendar is irrelevant.</p> <p>6 Q What would a chart look like if both lines</p> <p>7 were done on a quarterly basis?</p> <p>8 A I don't know.</p> <p>9 Q Now, there is a gap in the far right or</p> <p>10 ride side between actual employment and City</p> <p>11 forecast?</p> <p>12 A Yes.</p> <p>13 Q In just absolute terms, what's the number</p> <p>14 of the difference between actual employment in</p> <p>15 the City forecast as you have it on your chart?</p> <p>16 A A few thousand.</p> <p>17 Q Less than 1 percent?</p> <p>18 A Well, it depends at which point you're</p> <p>19 looking, or course.</p> <p>20 Q At the very end.</p> <p>21 A Well, at the very end, we're looking at a</p> <p>22 dip, which is transitory. I don't think it's a</p> <p>23 fair comparison. I think what you would wish</p> <p>24 to do is compare, should you wish to do it, and</p> <p>25 ignoring the fact that one is rising while the</p>
<p style="text-align: right;">Page 127</p> <p>1 home ownership? Well, I have not attempted to</p> <p>2 measure that.</p> <p>3 Q Okay. Let's look at Chart 5, city</p> <p>4 employment actual versus forecast.</p> <p>5 First of all, do I read this correctly</p> <p>6 that the blue line, which is actual employment,</p> <p>7 is done quarter by quarter or even month by</p> <p>8 month?</p> <p>9 A It is month by month.</p> <p>10 Q And the red line is done what?</p> <p>11 A As I indicate in the report, the City</p> <p>12 forecast is not monthly or, rather, maybe it</p> <p>13 is. I don't recall. But in order to put all</p> <p>14 of this -- better than my speculating about it</p> <p>15 now, let me, if I may, just refer back to my</p> <p>16 report.</p> <p>17 Q Please do. Please do.</p> <p>18 A (Witness views document.)</p> <p>19 Well, at one point, I had some narrative</p> <p>20 addressing this, which I don't recall at the</p> <p>21 moment exactly, but in order to put these two</p> <p>22 series on a comparable basis, so to speak, the</p> <p>23 City forecast had to be represented in this</p> <p>24 way.</p> <p>25 The implication of the straight lines is</p>	<p style="text-align: right;">Page 129</p> <p>1 other is declining, a fact that in my view is</p> <p>2 quite important. But putting that aside, what</p> <p>3 you would wish to do, for the sake of a fair</p> <p>4 comparison, is take the average over the past</p> <p>5 several months for the one versus the average</p> <p>6 for the past several months over the other,</p> <p>7 given the erratic and essentially also cyclical</p> <p>8 behavior of the actual employment series.</p> <p>9 So if I were undertaking the exercise</p> <p>10 you're suggesting, I would take, I guess,</p> <p>11 something like 285 over 280, which would be a</p> <p>12 difference of about 5,000 jobs.</p> <p>13 Q Of course that's not something you</p> <p>14 actually have done, though, correct?</p> <p>15 A Well, I just did it in a rough way. As I</p> <p>16 suggested a moment ago, to me far more</p> <p>17 important is the deviation in trend.</p> <p>18 Q Do you have this on a spreadsheet of some</p> <p>19 sort?</p> <p>20 A Yes. I believe every number is on</p> <p>21 spreadsheets that have been provided.</p> <p>22 Q Okay. But if we take the very end of your</p> <p>23 blue line, the last part which is an uptick,</p> <p>24 that puts you at about 283?</p> <p>25 A That's a fair estimate, yes.</p>

	Page 130	Page 132
1 Q	The City is at 280?	1 A Oh, yes.
2 A	Yes.	2 Q People who live in Detroit and work
3 Q	Three thousand job difference?	3 outside of Detroit?
4 A	Yes.	4 A No.
5 Q	Is 1 percent material, in your opinion?	5 Q People who live outside of Detroit and
6 A	What is material in my opinion here, as	6 work in Detroit?
7 I've said twice now, is the deviation in		7 A Yes.
8 trends. One is rising, the other is declining.		8 Q Okay. Now, let me ask you a question just
9 And, in fact -- and, in fact, the City's		9 about people who work outside of Detroit, but
10 employment forecast, it forecasts employment		10 live in Detroit.
11 notwithstanding its representation of a more		11 Are they more or less likely to own a home
12 positive employment picture in its list of		12 in Detroit than somebody who lives and works in
13 assumptions, the City is actually forecasting		13 Detroit?
14 declining employment up until 2021 or so, and		14 A I have not looked at the data that would
15 then only minuscule gains in employment in the		15 inform a judgment on that issue.
16 last two years of the 10-year period, entirely		16 Q Okay. Let's move on to the next chart.
17 inconsistent with any vision of the City as		17 Chart 7 is, I think, the same two variables but
18 being in a state of recovery and inconsistent		18 for a period going forward.
19 with the trend here, however moderate the		19 A Yes.
20 upward trend in these data, and also with the		20 Q Okay. And as I -- the blue line -- you
21 behavior of employment through cycles in the		21 have a blue line that becomes a dotted line
22 past.		22 here, correct?
23 Q Now, if your chart here were on a scale of		23 A Yes.
24 zero to 290,000 instead of 265 to 290,000, how		24 Q And that is your projection, that's an FTI
25 dramatic would the difference be between the		25 protection, correct?
	Page 131	Page 133
1 blue line and the dotted red line?		1 A Yes, subject to the qualification that I
2 MR. SMITH: Objection. Form.		2 had introduced very early on in this
3 A Of course the deviation would look much,		3 discussion, you know. Any projection that we
4 much smaller in relative terms, but the purpose		4 make going forward ten years is a projection
5 of this chart is to focus on recent events and		5 proffered only under duress, so to speak, for
6 on the discrepancies I have just outlined.		6 the need to evaluate the City's.
7 Q Okay. Let's look at Chart 6, if we could.		7 Q Understood.
8 This is a chart that compares two		8 And the dotted red line, that's the City's
9 variables. One is the Detroit City Employment		9 projection is the red?
10 vs. The General Fund Property Tax Revenue,		10 A Yes.
11 correct?		11 Q Okay. I justed want to make sure.
12 A Yes.		12 Now, when you are -- I'm just going to
13 Q Okay. First of all, is the red line		13 focus on the dotted blue line here, okay?
14 number nominal dollars or real dollars?		14 When you project out the dotted blue line,
15 A These are nominal dollars.		15 what period of time do you use for your
16 Q Nominal dollars. Okay.		16 projection?
17 And when you say "Detroit City		17 A That would be a projection of data whose
18 employment," what are you referring to?		18 last real value is May of this year.
19 A The very same data series we were just		19 Q Okay. And beginning when?
20 discussing.		20 A Beginning with 2003.
21 Q And that data comes from the Bureau of		21 Q Now, here there is, I see, something that
22 Labor Statistics?		22 says: "Employment assuming 2012/2013 growth
23 A That's correct.		23 rate."
24 Q Does it include people who live in Detroit		24 A Yes.
25 and work in Detroit?		25 Q What does that mean?

<p style="text-align: right;">Page 134</p> <p>1 A That means that dotted line assumes a 2 percentage rate of increase in employment equal 3 to the percentage increase experienced from 4 2012 to '13.</p> <p>5 Q Can you tell me why you didn't go back 6 earlier than 2012?</p> <p>7 A Because one needs to consider the cycle, 8 and in my view an appropriate measurement that 9 takes into consideration the timing of the 10 cycle ought to -- ought to begin with the data 11 in 2012.</p> <p>12 If we look back at Chart 4, we see that 13 the upward trend in employment did not begin 14 until -- well, this has some -- some ambiguity 15 here. I am -- I am attributing -- rather, I 16 identify 2011 as the beginning of the upward 17 trend in employment in the City that we are 18 observing now, and the period immediately prior 19 as the period of stabilization, so-called, that 20 I referred to earlier.</p> <p>21 The history of cycles both in Detroit and 22 elsewhere suggests, and a lot of other economic 23 data that's been released lately, suggests that 24 this increase in Detroit employment experienced 25 in the last two or three years, '11, '12, '13,</p>	<p style="text-align: right;">Page 136</p> <p>1 but Michigan in general over that period. 2 Reduction in the employment and output of 3 the auto industry, and it's related industries 4 in particular.</p> <p>5 Q So let's go back to Chart 7 again, which 6 is where we were.</p> <p>7 What does your dotted blue line look like 8 if you go back to 2003 and do the average from 9 2003 to 2013?</p> <p>10 A Bear with me. We're on which chart now?</p> <p>11 Q Page 22, Chart 7.</p> <p>12 A Sure. (Witness views document.)</p> <p>14 And I'm sorry, I must ask you to repeat 15 the question.</p> <p>16 Q What would your blue line do if you took 17 the 10-year average from 2003 to 2013?</p> <p>18 MR. SMITH: Objection. Form.</p> <p>19 A That, in my view, would be an impropriety 20 or certainly it would do what you have in mind, 21 but in my view, it would be an impropriety 22 because it would extrapolate a period of 23 economic readjustment in which the State and 24 the City were losing jobs, as you point out, 25 due to the exodus of some industry, it would</p>
<p style="text-align: right;">Page 135</p> <p>1 yeah, will persist for quite some time.</p> <p>2 Q How many years is "quite some time" in 3 your thinking?</p> <p>4 A In my thinking, again, my thinking under 5 duress, my obligation to deliver a forecast 6 through 2023, it takes that percentage increase 7 and applies it throughout the period.</p> <p>8 Q "The period" being all the way to 2023?</p> <p>9 A Yes. Yes.</p> <p>10 Q Okay. Now let's -- you've directed my 11 attention to Chart 4, so let's spend a minute. 12 Let's go back to Chart 4.</p> <p>13 Chart 4 shows a significant drop in jobs 14 from it looks to be 1999 to at least 2009, 15 correct?</p> <p>16 A Yes.</p> <p>17 Q In your view, does that reflect a 18 structural change in the Detroit economy?</p> <p>19 MR. SMITH: Objection. Form.</p> <p>20 A I'm sorry. As I indicated earlier, and I 21 believe as I indicated in the text, certainly 22 the reduction in employment in the City over 23 that period is attributable, to some 24 substantial degree, to the shift in industry 25 out of not just the City and its environment,</p>	<p style="text-align: right;">Page 137</p> <p>1 assume that that exodus of industry would 2 continue throughout the forecast period here. 3 And on top of that, it would not 4 sufficiently allow for the economic recovery 5 that is not -- that is now underway, a 6 conclusion reached by a fuller examination of 7 past cycles, as I indicated earlier. It would 8 be, in my view, in other words, a bias period.</p> <p>9 Q And do I understand from your use in your 10 projection here, you do not see a business 11 cycle downturn between now and 2023 in Detroit?</p> <p>12 A I do not. Again, I must constantly say 13 this, mine is a begrudging forecast and I have 14 just sought to make the most plausible 15 assumptions that I can given what I know and 16 recognizing their limitations.</p> <p>17 Q Okay. Let's go to Chart 8. It says: 18 "The Percentage Population Loss in 3-year 19 Intervals since 1990."</p> <p>20 A We are on Chart 8?</p> <p>21 Q Yep. Page 23. Just let me know when you 22 have it.</p> <p>23 A Have it.</p> <p>24 Q Okay. Is there any three-year period in 25 which Detroit does not lose population?</p>

<p style="text-align: right;">Page 138</p> <p>1 A Not on this chart.</p> <p>2 Q Okay. Is there a relationship, to your knowledge, between population and housing prices?</p> <p>5 A Of course one could postulate that in very long-term many, many decades, if a city losses population there will be less demand for housing and so prices, other things equal, will be less.</p> <p>10 However, I found no correlation whatsoever between the City's population losses over the past 30 years and property tax revenue.</p> <p>13 Q You said "no correlation." What do you mean?</p> <p>15 A No relationship. Population, as we know, is declining steadily over that period, yet property tax revenue is rising, generally, up until the recent past.</p> <p>19 Q Is one reason -- potential reason for the increase simply inflation?</p> <p>21 A Well, all of the City's numbers are influenced by inflation because they are all in nominal terms.</p> <p>24 Q Okay.</p> <p>25 A However, there are lots of other reasons</p>	<p style="text-align: right;">Page 140</p> <p>1 increases in property tax revenue.</p> <p>2 Q Have you finished your answer?</p> <p>3 A I guess so, yes.</p> <p>4 Q Is there a correlation you can point me to between population loss and changes in demand for housing?</p> <p>7 A Well, I think I've just addressed that, at least to some degree.</p> <p>9 Q Okay. So let's go to Chart 9, which I think I actually asked you about earlier.</p> <p>11 That's the one on Page 25.</p> <p>12 Do you have that in front of you?</p> <p>13 A I'm sorry. Yes, I do.</p> <p>14 Q I think I asked you about that already.</p> <p>15 A Yes.</p> <p>16 Q And Chart 10 is the next page, and so this shows average price as of May of this year going to a little over \$30,000, correct?</p> <p>19 A Yes.</p> <p>20 Q Okay. All right. Still about 1/3 of where it was 12 years ago?</p> <p>22 A Yes.</p> <p>23 Q How many houses have sold in Detroit, if you know, since 2003?</p> <p>25 A I do not know.</p>
<p style="text-align: right;">Page 139</p> <p>1 for that lack of relationship. You know, for one thing, at present, roughly half of property tax revenue is derived from businesses. Right?</p> <p>4 And, you know, you need to run a power plant, you need to run -- use -- employ a certain number of people no matter what the surrounding population might be.</p> <p>8 Another reason likely, at any rate, is that a good part of the loss in population has been younger people who don't own the homes they are leaving, but whose parents remain and continue to pay taxes, and I'm sure there are other reasons as well.</p> <p>14 Q Is there a correlation you are aware of between --</p> <p>16 A Pardon me, but there -- actually, I would like to add --</p> <p>18 Q Sure.</p> <p>19 A -- that while many properties decline in value, either in real or in nominal terms, if they are not maintained and so forth, there will be properties that appreciate in value beyond the rate of inflation in a City like Detroit, as we've witnessed in the past. And genuine increases in market price will generate</p>	<p style="text-align: right;">Page 141</p> <p>1 Q Okay. Let's look at Chart 11, Average Home Price vs. General Fund Revenue.</p> <p>3 Once again, these are nominal dollars, correct?</p> <p>5 A Correct.</p> <p>6 Q Now, property tax revenue, am I correct that it's fundamentally an arithmetic calculation where you multiply the taxable assessed value of a property times the tax rate?</p> <p>11 A Not quite. There is a constraint which is based on the behavior of the CPI. For those who do not sell their homes, increases in taxable value are limited to increases in the CPI.</p> <p>16 Q That's the so-called capped value?</p> <p>17 A Yes.</p> <p>18 Q Okay. All right. So let's go back to this, Chart 11. There we go.</p> <p>20 So we were talking about the arithmetic nature of this, so the property tax revenue, the red line, is where it is because it reflects arithmetically the assessed value of the property?</p> <p>25 MR. SMITH: Objection. Form.</p>

<p style="text-align: right;">Page 142</p> <p>1 A Among other things.</p> <p>2 Q Is there any greater driver, besides tax 3 rate, of property tax revenue than the assessed 4 value of the property?</p> <p>5 A Well, of course the number of parcels, for 6 one thing.</p> <p>7 Q For any given parcel. Just choose your 8 hypothetical.</p> <p>9 MR. SMITH: Objection. Form.</p> <p>10 A For any particular parcel, the parcel's 11 taxable value, coupled with the applicable tax 12 rate, will determine the tax revenue derived 13 from that parcel unless it is exempt from 14 taxation or subject to tax abatement.</p> <p>15 Q Okay. All right. Now, here in -- what is 16 Chart 11? Why have you included Chart 11 in 17 your report?</p> <p>18 A To demonstrate the insensitivity of 19 property tax revenue to fluctuations in average 20 home prices.</p> <p>21 Q Why do you say it's insensitive?</p> <p>22 A Well, among other reasons for those I 23 discussed earlier today, you know, the fact 24 that average home prices are a very poor 25 measure of trends in home prices, and in</p>	<p style="text-align: right;">Page 144</p> <p>1 year FY 2023.</p> <p>2 Q And it begins in 1988?</p> <p>3 A This analysis does, yes.</p> <p>4 Q And goes through -- you told me, I just 5 was writing it. You said?</p> <p>6 A 2023.</p> <p>7 Q Okay. Once again, you went to 2023 under 8 duress?</p> <p>9 A Correct.</p> <p>10 Q I mean, tongue in cheek. According to 11 what you said, you don't like going that far 12 but this exercise made -- you had to do.</p> <p>13 A Thank you. An apt characterization. I 14 appreciate that.</p> <p>15 Q All right. So let me ask you just a 16 general -- well, I was going to ask you what a 17 time series analysis is, but to be candid with 18 you, even if you answered it, I'm not sure I'd 19 understand your answer. So I'm not going to 20 ask you the question. I'll just go on 21 Wikipedia or something.</p> <p>22 A I would be happy to provide what I think 23 might be a reasonably simple explanation of it.</p> <p>24 Q Simple is good.</p> <p>25 A Okay. Put as simply as possible, the time</p>
<p style="text-align: right;">Page 143</p> <p>1 addition to that, we have the lag in 2 assessments versus market values, a factor 3 related to the relative stability of property 4 taxes as compared to other kinds of taxation 5 which is considered a virtue.</p> <p>6 Q Right. Okay.</p> <p>7 MR. STEWART: Now, where are we in time?</p> <p>8 Q We've got time for another chart and then 9 we could break. If you would like to keep 10 going.</p> <p>11 A Whatever you like.</p> <p>12 Q Go to the next chart. As you can see my 13 method is I am proceeding by the number of the 14 chart.</p> <p>15 A Your method is much more transparent than 16 theirs.</p> <p>17 Q Page 37, Chart 14. So this is a chart you 18 prepared.</p> <p>19 What does this chart purport to show?</p> <p>20 A Well, this superimposes upon the chart we 21 were looking at a short time ago, a line 22 representing the results of a time series 23 regression analysis of property tax collections 24 by the City, pardon me, and -- and by the same 25 method, forecasting those values through the</p>	<p style="text-align: right;">Page 145</p> <p>1 series analysis extrapolates from the 2 historical behavior of the series in question 3 into the future through a regression -- I'm 4 sorry, already I'm making it complicated.</p> <p>5 Q I know you were going to use a \$100 word.</p> <p>6 A Through a regression analysis in which the 7 independent variables are the lag values of the 8 variable itself.</p> <p>9 Q Okay. That is a -- I appreciate you -- I 10 think -- yeah, thank you.</p> <p>11 A The best I can do.</p> <p>12 Q I'm not sure I understand, but that's my 13 fault, not yours.</p> <p>14 A It's a sophisticated -- it's a form of 15 extrapolation.</p> <p>16 Q I understand. We'll just -- I'm going to 17 use the phrase time -- time series -- what is 18 called a time series analysis.</p> <p>19 A Time series, yes.</p> <p>20 Q I'm going to call it just a time series 21 analysis, unless that is incorrect.</p> <p>22 A That's fine.</p> <p>23 Q Okay. So let me ask a couple of 24 questions.</p> <p>25 Any particular reason you started in 1988?</p>

<p style="text-align: right;">Page 146</p> <p>1 A Yeah. We were unable to obtain the 2 CAFRs before that.</p> <p>3 Q Let me -- so we have got three -- four 4 lines here. We've got the dark blue line, 5 which is real property taxable value; the green 6 line, which is taxable value less renaissance 7 zones; the dotted line, which is the time 8 series regression forecast; and the red line, 9 property tax revenue forecast, and these -- 10 these four are what's shown on the chart.</p> <p>11 A Yes.</p> <p>12 Q Okay. And the dotted line is your time 13 series regression, the blue dotted line is?</p> <p>14 A Yes.</p> <p>15 Q Let me start by asking you this: Did -- 16 in your regression analysis, did the dotted 17 blue line predict that dip or change in 18 property tax revenue that we see in 2006?</p> <p>19 A 2006?</p> <p>20 Q Maybe it's 2007.</p> <p>21 A It's -- it probably is -- actually, it's 22 probably 2008. Well, maybe 2007. In any case, 23 I know what you're referring to.</p> <p>24 Q Yeah.</p> <p>25 A Of course a regression like this is not</p>	<p style="text-align: right;">Page 148</p> <p>1 well.</p> <p>2 Q Okay. Question for you on 14. You see 3 the City property tax revenue forecast, that is 4 that dotted red line, is that the forecast with 5 or without the restructuring and reinvestment?</p> <p>6 A Without.</p> <p>7 Q Without. Okay.</p> <p>8 So now you've got at the bottom here a 9 little table with various numbers in it and so 10 let me ask you a couple of questions about it.</p> <p>11 First of all, a parameter called MU and 12 another called AR1,1.</p> <p>13 A Yes.</p> <p>14 Q What are those?</p> <p>15 A MU refers to the predicted average value 16 of the series, MU. AR1 specifies the equation, 17 in this case telling us that this particular 18 equation predicts based upon one lag value as 19 opposed to sometimes an equation will predict 20 on two lag values as "explanations" and 21 whatnot.</p> <p>22 In general, the -- one desires the most 23 parsimonious solution under the simplest 24 equation that accounts for a substantial amount 25 of the historical valuation, which is what we</p>
<p style="text-align: right;">Page 147</p> <p>1 going to predict sudden departures from a 2 long-term trend. You know, no model predicts 3 perfectly. And in the ideal case, one would 4 use a regression like this coupled with an 5 analysis of the sources of deviation as were 6 experienced in 2007 and going forward to 7 produce a model that has greater explanatory 8 power and that more nearly tracks those values 9 in the periods since than does this, in the 10 ideal.</p> <p>11 Now we have quite plausible explanations 12 for that erosion in collections over that 13 period, which I addressed at some length a bit 14 earlier. Tough to quantify those or to create 15 a formula which effectively manifests them, nor 16 appropriate, in my view, if we have reason to 17 believe that the problems associated with that 18 deviation are being corrected, which in my 19 view, again, applies both with respect to the 20 recession impacts on ability to pay, the 21 recession being over and are being now on a -- 22 on a track of moderate improvement, both with 23 respect to that factor and with respect to the 24 inadequacies in the City's ability to enforce 25 the property tax as enumerated earlier, as</p>	<p style="text-align: right;">Page 149</p> <p>1 have here, really a very simple time series 2 model.</p> <p>3 And should you have interest, the other 4 variables that you see down below, AICS -- 5 pardon me, BB-SBC, I can't even quite read it, 6 I think it is SBC is what it should be, are 7 statistics that inform us as to the 8 desirability or undesirability of reaching out 9 to more complicated models to do the same job.</p> <p>10 You know, in this case, telling us that 11 it's essentially not worthwhile. What you gain 12 an explanatory power you lose in terms of 13 reliability.</p> <p>14 Q I see. So there is something here called 15 "Number of Residuals"?</p> <p>16 A Yes.</p> <p>17 Q What does that mean?</p> <p>18 A In any given period, there will be a 19 difference between the forecast value and the 20 actual. Here we have 33 periods and for each 21 there is a certain difference and that is what 22 is characterized as the residual.</p> <p>23 Q Can I tell for any given year what the 24 difference is from looking at this table?</p> <p>25 A You ought to be able -- well, clearly you</p>

<p style="text-align: right;">Page 150</p> <p>1 can get a rough idea, but -- and also bear in 2 mind that this is an index, not a value. These 3 are all index values. But the native files, 4 which have been conveyed to you, should contain 5 that information.</p> <p>6 Q Okay. Is this 33, then, an average of 7 some sort?</p> <p>8 A No. That's a reference to the number of 9 observations. We're dealing with 33 years 10 worth of data.</p> <p>11 Q I see. Okay. And then there is --</p> <p>12 A Historicals, that is.</p> <p>13 Q Sure. There is something called a 14 "Constant Estimate" or "Variance Estimate" and 15 "Standard Error Estimate," could you tell me 16 what those three are?</p> <p>17 A Yeah. These -- the constant is that part 18 of the equation which remains fixed. The 19 variance estimate is a measure of the degree of 20 difference on average as between the forecasted 21 value and the actual.</p> <p>22 Q Okay. What's the Standard Error Estimate?</p> <p>23 A That is that as well, but it's normalized 24 or, pardon me, variance -- very similar in 25 meaning. But the standard error tell us -- it</p>	<p style="text-align: right;">Page 152</p> <p>1 A I'm not sure that's meaningful, but let's 2 suppose it is mathematically in some sense 3 true, you would see greater variations.</p> <p>4 Q Okay. And what is the meaning, if any, of 5 having greater variations?</p> <p>6 A The greater the discrepancy between a 7 value and its forecast, the less precise is the 8 forecast and the less -- the less the precision 9 with which one can forecast.</p> <p>10 Q Okay. And I could learn that if I looked 11 up the native files?</p> <p>12 A Oh, yes. The native files should give you 13 all of the output and whatnot.</p> <p>14 MR. STEWART: Okay. It's about 12:20. 15 Why don't we take a lunch break now and 16 keep it as long or as short as you all would 17 like.</p> <p>18 I think we have food brought in.</p> <p>19 MS. HUNGER: We do, and it will be either 20 in --</p> <p>21 THE VIDEOGRAPHER: You want me to go off? 22 MS. HUNGER: Yes.</p> <p>23 THE VIDEOGRAPHER: The time is 12:20 p.m. 24 on August 1, 2014, and this completes Tape 25 Number 2.</p>
<p style="text-align: right;">Page 151</p> <p>1 also tell us, it also provides a sense of the 2 discrepancy in the value as between actual and 3 forecast, but it also enables us to 4 establish -- pardon me, confidence intervals 5 for the forecast.</p> <p>6 Q Are any of these estimates averaged over 7 all the years?</p> <p>8 A I'm sorry. I'm not following you.</p> <p>9 Q The Standard Error Estimate, for example, 10 is that a number that has been averaged over 11 the entire length of time that the --</p> <p>12 A Well, it would reflect values over the 13 full span of time. I don't think it's quite 14 accurate to describe it as an average, but in 15 some respect it might be. You're dividing by 16 the number of observations, typically.</p> <p>17 Q Okay. Is it also possible to come up with 18 an error year by year?</p> <p>19 A Well, of course.</p> <p>20 Q Okay. And but that's -- this is not an 21 error year by year, this is an error estimate 22 over all 33 residuals?</p> <p>23 A I believe so, yes.</p> <p>24 Q Okay. What would we see if we did look at 25 the standard error year by year?</p>	<p style="text-align: right;">Page 153</p> <p>1 (Whereupon, a lunch recess was taken.)</p> <p>2 THE VIDEOGRAPHER: The time is 1:00 p.m. 3 on August 1, 2014, and this is Tape Number 3.</p> <p>4 MR. STEWART: Okay. Before we get going, 5 I learned that we received the native files, 6 but only in the past hour. And, obviously, we 7 haven't had time to analyze or look at them. 8 And I'm not --</p> <p>9 Dr. Meyers, this is not a statement to 10 you. It's just on the record.</p> <p>11 So we are going to reserve all rights with 12 respect to those files in this deposition once 13 we've had a chance to look at them.</p> <p>14 MR. SMITH: And can you explain why you 15 delayed your request for the native files?</p> <p>16 MR. STEWART: We made the request right 17 after, I believe, we received Dr. Meyers' 18 report.</p> <p>19 MR. SMITH: I don't think that's true.</p> <p>20 MR. STEWART: Okay. Well, we each have 21 our positions.</p> <p>22 MR. SMITH: Well, I mean, there was a 23 delay, I'm wondering why in the request.</p> <p>24 MR. STEWART: Well, may I ask Dr. Meyers, 25 when did you make your native files available</p>

<p style="text-align: right;">Page 154</p> <p>1 to counsel?</p> <p>2 THE WITNESS: Yesterday, I believe.</p> <p>3 MR. STEWART: Well, we're going to</p> <p>4 disagree on that, but there's no point arguing</p> <p>5 about it right now.</p> <p>6 BY MR. STEWART:</p> <p>7 Q I think we were talking about Chart 14 on</p> <p>8 Page 37. I think we may have finished that</p> <p>9 part of the examination.</p> <p>10 Let's go to Chart 15, which is the next</p> <p>11 page, Page 38.</p> <p>12 Do you have -- do you have Chart 15 before</p> <p>13 you?</p> <p>14 A Yes.</p> <p>15 Q Okay. What is Chart 15?</p> <p>16 A Chart 15 superimposes upon Chart 14 a line</p> <p>17 reflecting a forecast of property tax revenues</p> <p>18 going forward based on the assumption that they</p> <p>19 follow the CPI.</p> <p>20 Q Just for the record, tell me what the CPI</p> <p>21 is?</p> <p>22 A The Consumer Price Index.</p> <p>23 Q Is that a CPI for any particular part of</p> <p>24 the United States?</p> <p>25 A No. That's for the -- well, pardon me,</p>	<p style="text-align: right;">Page 156</p> <p>1 Do you have any reason to believe that</p> <p>2 this CPI is for the City of Detroit only?</p> <p>3 A I don't believe the CPI is measured just</p> <p>4 for the City of Detroit.</p> <p>5 Q What area region or other geographical</p> <p>6 place does the CPI cover, if you know?</p> <p>7 A As I said, I believe this relates to the</p> <p>8 SMSA. On the other hand, it might relate to</p> <p>9 the state overall. I don't quite remember.</p> <p>10 Q Okay. And let me show you.</p> <p>11 MR. STEWART: Let's mark this. This is --</p> <p>12 what's our next one? Is it 3 or is it 4?</p> <p>13 THE COURT REPORTER: 3.</p> <p>14 (Whereupon, the aforementioned document</p> <p>15 entitled Consumer Price Index, Detroit, Ann</p> <p>16 Arbor, Flint, June 2013, was marked as Meyers</p> <p>17 Exhibit 3 for identification as of this date by</p> <p>18 the reporter.)</p> <p>19 BY MR. STEWART:</p> <p>20 Q Is Exhibit 3 before you, Dr. Meyers?</p> <p>21 A Yes, it is.</p> <p>22 Q Okay. And could you, just for the record,</p> <p>23 tell us what Exhibit 3 is.</p> <p>24 A It is a Bureau of Labor Statistics</p> <p>25 publication entitled, "Consumer Price Index,</p>
<p style="text-align: right;">Page 155</p> <p>1 actually. Oh, now I remember. That's</p> <p>2 actually, I believe, CPI for the Detroit area.</p> <p>3 Q The Detroit statistical metropolitan area?</p> <p>4 A Yes. Yes. I believe. I can check</p> <p>5 that again, but I do know that I believe the</p> <p>6 CPI forecast for 14 and 15 was -- rather were</p> <p>7 forecasts of the state, made by the state that</p> <p>8 is, for the Detroit SMSA, and those forecasts</p> <p>9 were then extrapolated forward from those</p> <p>10 years.</p> <p>11 Q Okay. Let me -- sorry. Who was the</p> <p>12 source again of the CPI?</p> <p>13 A I'm sure we can find it in the footnotes</p> <p>14 to the chart. I'm looking now.</p> <p>15 Q I see.</p> <p>16 A Here I believe it is the Michigan House,</p> <p>17 probably fiscal agency. You'll see the third</p> <p>18 line from the bottom in the source materials.</p> <p>19 Q Uhm-uhm.</p> <p>20 A Gives the House, the Michigan House</p> <p>21 website, revenue forecast, economic outlook,</p> <p>22 revenue estimate.</p> <p>23 Indeed, I believe these were the same</p> <p>24 document that Ms. Sallee referred to.</p> <p>25 Q I see. All right. Okay.</p>	<p style="text-align: right;">Page 157</p> <p>1 Detroit, Ann Arbor, Flint, June 2013."</p> <p>2 Q Can you tell me, one way or the other,</p> <p>3 whether this is the region as to which the CPI</p> <p>4 that you used relates?</p> <p>5 A I don't know. I would have to consult the</p> <p>6 source document for this chart.</p> <p>7 Q Okay. On Page 3 of this, do you see the</p> <p>8 second to last paragraph describes for us what</p> <p>9 the -- this, by the way, is the CPI for</p> <p>10 Detroit, Ann Arbor, Flint. And do you see</p> <p>11 Page 3, second to last paragraph, this document</p> <p>12 tells us which areas are covered by the</p> <p>13 Detroit, Ann Arbor, Flint, Michigan</p> <p>14 consolidated area?</p> <p>15 A Oh, yes.</p> <p>16 Q That is a series of counties, Genesee,</p> <p>17 Lapeer, Lenawee, Livingston, Macomb, Monroe,</p> <p>18 Oakland, St. Clair, Washtenaw and Wayne</p> <p>19 Counties as well as Detroit itself, correct?</p> <p>20 A Yes.</p> <p>21 Q Okay. Now, do you have any idea what</p> <p>22 percentage of the population of that region is</p> <p>23 Detroit's?</p> <p>24 A No.</p> <p>25 Q Would it reflect upon the accuracy of your</p>

Page 158

1 use of the CPI whether Detroit's population  
 2 were a large or not a large percentage of the  
 3 population of the region that the CPI talks  
 4 about?

5 A I don't believe so, no.

6 Q Why not?

7 A Because one does not find very large  
 8 variations in the CPI from one region -- from  
 9 one region to another. And I would be  
 10 surprised if there were a material difference  
 11 in the behavior of the CPI in Detroit as  
 12 distinct from the surrounding areas.

13 Q What would you do if you wanted to see if  
 14 there were a material difference between them?

15 A Well, I don't know if it's possible to do  
 16 that because, as I indicated a moment ago, I  
 17 don't believe the Bureau of Labor Statistics  
 18 attempts to measure the Consumer Price Index  
 19 for individuals living in Detroit city  
 20 specifically.

21 Q Right.

22 A I could be wrong, but that's my sense of  
 23 it.

24 Q Uhm-uhm. Okay. But is there some way of  
 25 determining changes in the cost of things in

Page 160

1 Q That the CPI movement for Detroit, just as  
 2 the City of Detroit, would be parallel to that  
 3 of the region in which Detroit sits.

4 A It's a process commonly used in estimating  
 5 an economic variable for a relatively small  
 6 region encompassed by a larger. For economic  
 7 and other reasons, the federal government does  
 8 not endeavor to measure series such as the CPI  
 9 on a highly-refined geographic basis. I'm sure  
 10 you can understand why.

11 Were such a measure available, I would  
 12 certainly have sought to find it, but my  
 13 experience over a great many years indicated to  
 14 me that it would not be available, and some  
 15 effort to determine whether it was established  
 16 within reasonable certainty that it was not.

17 It is commonplace, again, let me say, to  
 18 use a regional or SMSA-based CPI to draw  
 19 inferences about the behavior of prices for  
 20 consumers in areas within that larger region.

21 Q Would it not have been better practice to  
 22 simply not use the CPI at all?

23 A Hardly. I mean, for one thing, for one  
 24 thing, the state itself, as we were discussing  
 25 earlier, uses the CPI as a basis for escalating

Page 159

1 Detroit? Is there a means of doing that?

2 MR. SMITH: Objection. Form.

3 A Well, sure, but not in a manner at all  
 4 comprehensive or systematic enough to replicate  
 5 how the CPI is measured by the BLS.

6 Q What evidence is there that economic  
 7 trends in Detroit parallel the economic trends  
 8 in, say, Oakland County?

9 A I have not looked at Oakland County,  
 10 specifically. And as I -- again, as I  
 11 indicated earlier, one finds variances in  
 12 economic performance from one place to another  
 13 necessarily given differences in the  
 14 composition of industry and so on.

15 The real issue is whether or not those  
 16 differences are significant enough to  
 17 materially affect the conclusions I've reached  
 18 here and I -- very much doubt that they could  
 19 be.

20 Q Well, you say you "doubt they could be,"  
 21 but I guess my question would be: What work  
 22 have you done to determine whether or not your  
 23 assumption is correct?

24 MR. SMITH: Objection. Form.

25 A Which assumption are you referring to?

Page 161

1 housing prices, both in Detroit and elsewhere  
 2 in the state. And if one begins, for example,  
 3 with the presumption that housing prices are  
 4 now essentially an equilibrium, vis-a-vis  
 5 taxable values, either now or in 2013, it makes  
 6 sense to assume that the mechanisms for  
 7 adjustment work as follows:

8 There are two groups. There are those who  
 9 sell their houses, and whose houses then are  
 10 decoupled from the CPI base constraint, and  
 11 those -- the prices of those houses will follow  
 12 the mark, so to speak. All right.

13 CPI increases historically have been well  
 14 below appreciation of value of real estate  
 15 making this -- the use of that factor in this  
 16 case conservative.

17 Now let's consider the second group.  
 18 Their appraised values will be constrained by  
 19 the CPI, but, therefore, other things equal,  
 20 escalated by the CPI. And so with respect to  
 21 that group, use of the CPI to escalate assessed  
 22 value makes a lot of sense.

23 Q Do the CPI itself contain a value for  
 24 housing prices?

25 A Housing costs, yes.

<p style="text-align: right;">Page 162</p> <p>1 Q Housing prices is my question.</p> <p>2 A Oh, I'm sorry.</p> <p>3 Q Does the CPI take into account changes in</p> <p>4 the price of buying or selling a house?</p> <p>5 A Well, certainly would seek to reflect</p> <p>6 that.</p> <p>7 Q Well, does it -- and my narrow question</p> <p>8 is: Do housing prices, per se, get taken into</p> <p>9 account in the CPI?</p> <p>10 MR. SMITH: Objection. Asked and</p> <p>11 answered.</p> <p>12 A I believe -- I believe I did answer it,</p> <p>13 which is most certainly.</p> <p>14 Q Okay. So if the average price of a house</p> <p>15 goes up in Wayne County, the CPI will reflect</p> <p>16 the fact that the average price of the house, a</p> <p>17 house in Wayne County, went up?</p> <p>18 A Well, let's step back for a moment and</p> <p>19 consider that. There is a mechanical process</p> <p>20 through which the CPI is revised. And I</p> <p>21 suppose it's like the collection of taxes in</p> <p>22 that sense. There's no assurance, nor is it</p> <p>23 plausible, to believe that this month's CPI</p> <p>24 will reflect a change in housing prices this</p> <p>25 month.</p>	<p style="text-align: right;">Page 164</p> <p>1 not -- we end up -- to be sure, again, it's not</p> <p>2 pari-passu. But the cost of homeownership is a</p> <p>3 function, among other things, of the amount of</p> <p>4 one's mortgage and that in turn is a function</p> <p>5 of the price of one's house.</p> <p>6 Q Does the cost of housing also reflect the</p> <p>7 assessed value of the property?</p> <p>8 A The direction of influence is opposite; is</p> <p>9 it not?</p> <p>10 In other words, assessed value will</p> <p>11 reflect, should reflect price, at least broadly</p> <p>12 speaking, over time. But prices will reflect</p> <p>13 the assessed values only to the extent that</p> <p>14 property taxes, for example, must be taken into</p> <p>15 consideration in valuing real estate to be sure</p> <p>16 it's a factor that's considered, but only one</p> <p>17 of a great many.</p> <p>18 Q Okay. By the way, on housing assessments,</p> <p>19 how often in practice has the City of Detroit</p> <p>20 reassessed residential roll properties?</p> <p>21 A I don't know the answer to that question.</p> <p>22 Q Okay. So let me ask another question.</p> <p>23 What proportion --</p> <p>24 A Although -- pardon me again. So many</p> <p>25 things in play here. It's not easy to remember</p>
<p style="text-align: right;">Page 163</p> <p>1 In other words, that the one will keep up</p> <p>2 with the other both moving pari-passu. And</p> <p>3 maybe it's as possible with the CPI is -- is</p> <p>4 revised with such alacrity with respect to all</p> <p>5 its components, but I would very much doubt it.</p> <p>6 So there is that factor to consider.</p> <p>7 Certainly, as I said before, on a</p> <p>8 year-to-year basis over the long haul, the CPI</p> <p>9 is a conservative measure of the -- of</p> <p>10 appreciation in -- in housing values.</p> <p>11 Do also bear in mind that while housing</p> <p>12 prices are an important component of the CPI,</p> <p>13 they are but one component out of a great many.</p> <p>14 Consequently, for example, a 2 percent increase</p> <p>15 in the CPI may be entirely consistent with a</p> <p>16 5 percent increase in housing prices or a</p> <p>17 1 percent increase. It would depend on the</p> <p>18 behavior of the other components as to whether</p> <p>19 or not that's true.</p> <p>20 Q Isn't it the case, though, that the CPI</p> <p>21 takes into account the cost of housing, but not</p> <p>22 housing prices, per se?</p> <p>23 A Yes. That's quite right, but the cost of</p> <p>24 housing reflects housing prices. Absolutely.</p> <p>25 We know from our mortgages. I mean, do we</p>	<p style="text-align: right;">Page 165</p> <p>1 them all at one.</p> <p>2 But certainly the changes in aggregate</p> <p>3 taxable value shown in Chart 16, for example,</p> <p>4 reflect periodic reappraisals.</p> <p>5 Q How do you know that?</p> <p>6 A Indeed, the data contained in the Plante</p> <p>7 Moran study, if I recall correctly, indicate</p> <p>8 assessed values per parcel as having changed</p> <p>9 rather significantly over the past several</p> <p>10 years, and that, in turn, implies continuing</p> <p>11 reassessments. To what degree, I don't know.</p> <p>12 And over what periods of time in terms of</p> <p>13 timing, I don't know.</p> <p>14 Q Other than inferences you make, do you</p> <p>15 actually know as a fact how often houses in</p> <p>16 Detroit are reassessed?</p> <p>17 MR. SMITH: Objection. Asked and</p> <p>18 answered.</p> <p>19 A I can't answer the question beyond in the</p> <p>20 way that I just have.</p> <p>21 Q Okay. So let me now -- well, let me ask a</p> <p>22 couple other questions.</p> <p>23 Do you know what percentage of families in</p> <p>24 Detroit are below the poverty level?</p> <p>25 A Well, I did know that ratio as recently as</p>

<p style="text-align: right;">Page 166</p> <p>1 yesterday, but now it slips my mind. It's a -- 2 it's a high percentage accordingly. 3 Q Are low income families more likely or 4 less likely to own a home? 5 A Less likely, of course. 6 Q Let's look at 16. Tell me what your 7 Chart 16 shows. 8 A Sixteen portrays the result of the 9 application of a third forecasting methodology. 10 Itself reflecting the assumption that over the 11 next 10-odd years, there will be a recovery in 12 Detroit sufficient to generate property tax 13 revenues comparable to those revenues which 14 prevailed in 2006 and '7, approximately. 15 Q Okay. Just in 2006, 2007 or in some other 16 period of time? 17 A Well, I'm just eyeballing the chart at 18 this moment, so I can only give you a rough -- 19 a rough reading. 20 Q Let's see whether or not the narrative -- 21 A It may. 22 Q Yeah, let's look at that. I just want to 23 make sure we're all on the same page literally. 24 Whatever it is. 25 A Fifty-eight, I think, is the relevant</p>	<p style="text-align: right;">Page 168</p> <p>1 2008, correct? 2 A Yes. It essentially brings us back by 3 2023 to where we were just before the 4 recession. 5 Q Okay. Sort as if the recession hadn't 6 happened. 7 A Well, absolutely not. 8 Q So how do you get back to where you were 9 before the recession? 10 A Well, had the recession actually not 11 happened, we would be at a point substantially 12 higher than that. The point, in other words, 13 reflects the fact of a recession as having 14 depressed things in the past, and that's why 15 the term "recovery" is used, for example. 16 Q I see. 17 A In a certain sense, it is as if it never 18 happened, but I just wanted to make that point. 19 It doesn't disregard its having happened. 20 Q What evidence do you have to cause you to 21 conclude that the City of Detroit will recover 22 at a rate comparable to the rate of growth it 23 had before the recession? 24 A Not talking about growth here. We're 25 talking about a level.</p>
<p style="text-align: right;">Page 167</p> <p>1 paragraph. 2 Q Good. Thank you. Okay. 3 Does looking at this -- just let's look at 4 Paragraph 58 together. Does it tell you what 5 period of time you're extrapolating from for 6 your pre-recession-based forecast on Chart 16? 7 A (Witness views document.) 8 Well, here again, I would -- I would infer 9 that pre-recession is just that, and relates to 10 the period, the year at any rate, 2007, and the 11 years immediately preceding that we see -- 12 again, I wish I had a -- well, I can use this 13 as a ruler (indicating). 14 Here we go. '8 -- no, '7. Correct. '7, 15 '6, even '5 and '4 are all at about the same 16 level. So the reference is likely to that 17 period. 18 Q Okay. So it appears to me -- and tell me, 19 I'm sure I've got this wrong -- is what Chart 20 16 shows us is a solid blue line that has a 21 slope to it starting at about 2013 or 2014, 22 correct? 23 A Yes. 24 Q And the slope for that solid blue line is 25 derived from some set of data points before</p>	<p style="text-align: right;">Page 169</p> <p>1 Q Okay. 2 A And -- and -- and restoration to the 3 pre-recession level. 4 As I note in my narrative, while an 5 aggressive assumption perhaps is not as 6 aggressive, in my view, as the City's is in the 7 negative sense, we have -- more -- more 8 specifically though, more -- more germane is 9 the fact that we have begun what by virtue of 10 the behavior of the employment numbers and 11 other factors is quite clearly a recovery that, 12 in my view, it's going to be sustained 13 throughout this period, although a very 14 moderate recovery, relative terms. 15 Even this pre-recession-based forecast 16 essentially tell us -- tells -- in essence 17 means that Detroit will have not made any 18 progress in terms of the size and strength of 19 its economy by the end of this 10-year period, 20 by 2023, relative to where it was in the middle 21 part of the last decade. 22 Q Uhm-uhm. What has happened to Detroit 23 today versus where it was in the middle of the 24 last decade? 25 A Well, a great many things, of course.</p>

	Page 170	Page 172
1 Q What are some?		1 A I'm sorry. Chart 17?
2 A One of them -- one of them is, as I indicated earlier, an evident deterioration in the City's ability to collect taxes; not just property but others, other taxes as well.		2 Q Yeah. That's Page 40.
3 Hence, the discrepancy between the red line and the blue in this chart. Something we discussed earlier.		3 A Yeah.
4 And to be sure, as I said earlier, the recession had something to do with that gap.		4 Q It's entitled, "Employment in the City of Detroit, January of 1990 to May 2014," correct?
5 But the recession is -- has come to an end and a recovery is in progress. The population declined in the City -- population continues to decline, but at a much reduced rate. I think it quite likely that the population over the next decade will stabilize. There is some in migration.		6 A I'm sorry. Yes.
6 There is some demand for housing on the part of individuals who are moving to the city, and there are other signs of recovery as well.		7 I'm just wondering as to whether I should add to my last answer. I don't know that it's worthwhile. It's -- I try to be as complete and to use these questions as an opportunity to introduce some relevant information. Just for the sake of it, I will given the opportunity here.
7 Q When you say, "population will stabilize," do you mean that it will --		8 You know, with respect to Chart 16, I would simply repeat, once again, that it is not appropriate to pick and choose periods on a graph based on a desired objective. We have a decline, sure. But that decline is influenced both by the factors I addressed earlier, that is, those -- those problems that are being mitigated at present; whether the decline and economic growth or the problems in tax collection and whatnot.
8 A -- stop declining.		9 And in addition, by the very character of the time-series analysis itself, assigning as
9 Q Will it go up, in your opinion?		
10 A Relative to what it is now, in my opinion,		
	Page 171	Page 173
1 I believe it will go up somewhat.		1 it does significant weight to the immediate past.
2 Q When you say, "somewhat," what do you mean?		2 So I would simply -- and a fact, which as I discussed earlier actually, within the ideal case be addressed by modifications if it took into consideration changes in progress. Not the case here.
3 A My thought is on the order of 5 percent as opposed to 20 or 30.		3 I'm sorry for --
4 Q Let's go back --		4 Q I see. When you say, "immediate past" in Chart 16, what is the immediate past?
5 A In the roughest of terms.		5 A Here I would define it as the post-2007 period, 2007 through 2013.
6 Q Let's go back to Chart 16. If you were to draw -- and this is the one that's got three lines on it, the pre-recession-based forecast, the CPI-based forecast and the time-series forecast, correct, all of three of them are there?		6 Q Okay. So if we draw that line, it's a negative line, right?
7 A Yep.		7 A Well, of course.
8 Q If you were to draw a line just on the time-series forecast between its peak, which is at 160 and looks like 2007, in the last known year we have, which is 2013 or 2014, what's the slope of that line?		8 Q Okay. Now, by the way, on Chart 16, both the a pre-recession forecast and the CPI-based forecasts are straight lines, correct?
9 A MR. SMITH: Objection. Form.		9 A Yes.
10 A The slope? I can't give you a formula for it, but it's -- pardon me, an evident decline, of course.		10 Q Is there any reason they are straight lines as opposed to a line that has some kind of a curve to it?
11 Q Let's go to Chart 17. Tell me, if you could, what is Chart 17?		11 A Of course. It would be presumptuous -- to present yearly fluctuations in what is essentially a very crude sort of analysis.

<p style="text-align: right;">Page 174</p> <p>1 Q Chart 17 is -- we were talking about and 2 that is a repeat of an earlier chart about 3 employment, but then it extrapolates. And I 4 think the earlier chart is Chart 4, if I have 5 that right. You might want to just compare 6 them to make sure I'm right, but I think it's 7 Chart 4 with some additional information on it.</p> <p>8 A That's correct.</p> <p>9 Q Okay. And the additional information is 10 the dotted red line called "trend line," 11 correct?</p> <p>12 A Yes.</p> <p>13 Q And the solid blue line that doesn't have 14 title to it, but it's a horizontal blue line, 15 right?</p> <p>16 A Yes.</p> <p>17 Q Okay. The trend line is what?</p> <p>18 A The trend line is an extrapolation of the 19 growth rate over the period beginning -- let me 20 see, I believe January 2012 and ending May of 21 this year.</p> <p>22 Q So how long a period is that?</p> <p>23 A That's a period of approximately two and a 24 half years.</p> <p>25 Q And what would happen if you took a longer</p>	<p style="text-align: right;">Page 176</p> <p>1 A Yes.</p> <p>2 Q And that would be at an employment rate, 3 it looks to be, and I could be a little off, a 4 little over 310,000 jobs.</p> <p>5 A Yes.</p> <p>6 Q Okay. Once again, why is this trend line 7 straight instead of curved?</p> <p>8 A Here again, because it is in my view, at 9 any rate, inappropriate to feign an ability to 10 predict yearly fluctuations in this context.</p> <p>11 Q Okay. Now, this is your trend line 12 through, I think we just saw it, through March 13 of 2014?</p> <p>14 A Are we still on Chart 17?</p> <p>15 Q Indeed we are.</p> <p>16 A And through -- the line runs or should run 17 through May of year -- oh, pardon me. I'm so 18 sorry. The actuals should run through May of 19 this year. The trend line should run through 20 2023.</p> <p>21 Q Okay. Let's go now to Chart 18. And 22 Chart 18 is an average of alternatives. 23 Is it fair to say, and I think you've 24 written this here, this chart has a dotted blue 25 line, and you say there it's the average of</p>
<p style="text-align: right;">Page 175</p> <p>1 period than that?</p> <p>2 A Took it in what sense?</p> <p>3 Q If you averaged -- if you made a trend 4 line a period of time longer than the period 5 you took --</p> <p>6 A Of course, of course. But that would be 7 inappropriate for reasons I articulated earlier.</p> <p>9 Q I see. Now the trend line goes up and meets the solid blue line.</p> <p>11 A That's because the solid blue line connects the terminal point in the trend line to the historic values back in '07 essentially.</p> <p>14 Q So that's just to help us find what the value was.</p> <p>16 A Yes.</p> <p>17 Q It's not intended -- it's actually a help to the reader. It's not intended to be any kind of another effect or a conclusion of any sort?</p> <p>21 A Absolutely right.</p> <p>22 Q And what it tell us is, according to this chart, by 2023 this analysis predicts that employment will be what it was, it looks to be in '07 thereabouts.</p>	<p style="text-align: right;">Page 177</p> <p>1 time-series, CPI-based and pre-recession-based 2 forecast, correct?</p> <p>3 A Yes.</p> <p>4 Q So these are the previous three charts we 5 talked about and you've averaged them.</p> <p>6 A Yes.</p> <p>7 Q Okay, thank you.</p> <p>8 Did you give equal weight to all three 9 approaches?</p> <p>10 A Yes.</p> <p>11 Q Okay. The City forecast, I think you told 12 us was with the RRI's, correct?</p> <p>13 A No. These are --</p> <p>14 Q Is it not?</p> <p>15 A These are baseline forecasts, so to speak.</p> <p>16 Q Okay. All right. And so your approach here has tax revenue going up from -- well, first of all, these are indexed, correct?</p> <p>19 A Correct.</p> <p>20 Q An index value of about 105 to an index value of about 130, give or take a little bit?</p> <p>22 A That's right.</p> <p>23 Q Okay. Not to be argumentative with you, but would you agree with me that the accuracy of Chart 18 depends on the accuracy of Charts</p>

	Page 178		Page 180
1	15, 16 and 17?	1	A Not entirely sure about that. I would
2	MR. SMITH: Objection. Form.	2	call it -- I would rather call it pertinent
3	A In part, but not solely. There are other	3	information that has not been put into a
4	factors prompting me to take a more optimistic	4	systematic framework.
5	view of the City's economy than does the City	5	Q Okay. Good. Let's look at Chart 19.
6	in its presentations here.	6	Have you finished your answer by the way?
7	Q Okay. Tell me, if you could, in Chart 18	7	I didn't mean to cut you off.
8	if we just look at the dotted blue line without	8	A Yes.
9	reference to the three approaches --	9	Q Okay. Chart 19, what is Chart 19?
10	A Yes.	10	A Chart 19 portrays the forecast
11	Q -- what -- what's caused you to put that	11	redevelop -- the one we were just discussing as
12	dotted blue line at the slope that it has?	12	the average of the three particular forecasts
13	A Well, many things. I have made some study	13	described previously, compares our forecast to
14	of trends amongst businesses both within the	14	the City's, vis-a-vis a confidence interval
15	City and immediately around it. Trends in	15	based on our time-series regression analysis.
16	employment. And I have also followed, to some	16	Q So the confidence interval is based only
17	limited degree, the development of	17	on the time-series analysis?
18	infrastructure that would tend to promote the	18	A That's correct.
19	growth of the City entirely apart from what the	19	Q I see. Okay. So if you change that
20	City characterizes as reinvestment.	20	analysis in some way, you would change the
21	I have observed the behavior of	21	confidence interval as well?
22	individuals in the business community in	22	A Well, I don't know if -- I'm not sure -- I
23	Detroit with respect to the acquisition of	23	don't mean to be picky about this, but it's not
24	properties in the City that clearly imply what	24	evidence that a different equation, for
25	you would call a bullish view -- a more bullish	25	example, would generate a different confidence
	Page 179		Page 181
1	view of the City's prospects than it reflected	1	interval. It very well may. It very well may.
2	in the City's submissions.	2	But, again, beyond noting that this is, in
3	By no means an exhaustive study, but I	3	fact, the result of the equation that we were
4	have delved to some degree into the specifics	4	discussing earlier, I wouldn't attempt to
5	of the City's current circumstances in terms of	5	foresee the results of another comparable -- of
6	business development, industrial growth and so	6	the employment of another comparable equation.
7	forth.	7	Q Did you run different comparable equations
8	Q Have you reduced any of these observations	8	in the course of preparing Chart 19?
9	to writing?	9	A Only to the extent that we received
10	A No, I have not.	10	updated and real values from the City.
11	Q Or have you taken any of these	11	Q You didn't just run this chart with
12	observations and attempted to quantify them in	12	different assumptions to see what it would look
13	any way?	13	like?
14	A No. Apart from the fact that the	14	A Oh, no. I don't do that sort of thing.
15	employment growth numbers for particular	15	I -- I'm afraid not.
16	businesses that I referenced aren't just that,	16	Q Okay. So let's look at the chart. We
17	numbers, and I've acquired a sense of their	17	have a shaded area and the shaded area
18	magnitude.	18	represents the boundaries for 90 percent
19	Q Right. But you haven't taken any of those	19	confidence, correct?
20	numbers and made them an input into Chart 18.	20	A That's correct.
21	MR. SMITH: Objection. Form.	21	Q Upper and lower.
22	A I would call it an intellectual input.	22	A Well, lower. It's actually 5 percent on
23	Q Fair to say it's sort of a qualitative	23	each end.
24	side of your chart?	24	Q I see. So it's -- okay, got it.
25	MR. SMITH: Objection. Form.	25	And then we've got the dark blue line,

Page 182

1 that's property tax revenue, correct?  
 2 A Yes.  
 3 Q The dotted blue line is the FTI forecast,  
 4 correct?  
 5 A Excuse me. Yes. Yes.  
 6 Q And the dotted red line is the City  
 7 forecast, right?  
 8 A Yes.  
 9 Q Okay. Now, the City forecast is not  
 10 inside the shaded area until you get to about,  
 11 what, 2023 or something?  
 12 A It looks that way, yes.  
 13 Q In terms of percentages, how far is it  
 14 off, the shaded area, between today and 2023?  
 15 A I don't know. Not by much. That's not  
 16 actually the -- the relevant consideration.  
 17 Q I see. All right. Now, let me -- we're  
 18 done with charts.  
 19 I got a couple little questions. These  
 20 are coming from here and there. One is  
 21 Page 47, Paragraph 72.  
 22 A Yes.  
 23 Q Okay. It says: "Indeed the City  
 24 implicitly assumes that it will have surplus  
 25 revenues."

Page 183

1 Do you see that?  
 2 A Oh, yes.  
 3 Q Do you -- what do you mean by "surplus  
 4 revenues" there?  
 5 A What in the corporate arena would be free  
 6 cash flow; money available to pay creditors,  
 7 for example.  
 8 Q Now, do you understand that the City  
 9 intends to use surplus revenues to fund the  
 10 RRIs?  
 11 MR. SMITH: Objection. Form.  
 12 A Well, there are two elements to this:  
 13 There is a question of whether the City will  
 14 have surplus revenues. And there is a  
 15 question -- the narrower -- pardon me. The  
 16 narrower question of whether or not a portion  
 17 of the surplus revenues might be used to reduce  
 18 taxes.  
 19 You see, they maintain both -- both --  
 20 they make both assertions, and the joint  
 21 implications of those two assertions is that  
 22 there will be free cash flow, not just to  
 23 finance the reinvestment, but also to reduce  
 24 taxes.  
 25 Q Do you know what the state is of the

Page 184

1 City's thinking about possibly reducing taxes?  
 2 A I can only judge from what it has said in  
 3 the recent past.  
 4 Q Okay. Let me ask you a little about bit  
 5 the RRIs.  
 6 Do you know what percentage or portion --  
 7 any measure you want to use is going to be fine  
 8 with me -- of the spending on the RRIs comes  
 9 from money that's being borrowed?  
 10 A My understanding is that the exit  
 11 financing will support at least a portion of  
 12 RRIs.  
 13 Q Do you know what -- what percentage, how  
 14 much of the RRIs?  
 15 A I don't know.  
 16 Q More than 10 percent?  
 17 A A significant amount.  
 18 Q More than 20 percent?  
 19 MR. SMITH: Objection. Form.  
 20 A Well, here again, I -- I recognize that  
 21 it's a significant part -- significant amount,  
 22 but beyond that, I don't feel I should  
 23 speculate.  
 24 Q Do you mean significant percentage or a  
 25 significant absolute dollar amount?

Page 185

1 A Well, both.  
 2 Q When you say, "significant," what do you  
 3 mean in terms of percentage?  
 4 A Well, more than 20.  
 5 Q Okay. And do you understand that a  
 6 portion of the RRIs will be funded from the  
 7 City's own operations?  
 8 A That is what it represents.  
 9 Q Do you know what portion comes from the  
 10 City's own operations?  
 11 A No, I do not.  
 12 Q Okay. Will a portion come from grants?  
 13 A I believe it will.  
 14 Q Do you know what portion would come from  
 15 grants?  
 16 A Uncertain at this point, but I would -- I  
 17 would rather not speculate about it beyond  
 18 saying that past history and immediate history  
 19 suggests that it could be considerable amounts  
 20 of money.  
 21 Q And just to pin down "considerable," when  
 22 you use the word "considerable," do you mean --  
 23 A Hundreds of millions.  
 24 Q Hundreds of millions of dollars. That's  
 25 fine. Okay.

Page 186

1 So let me ask you about a couple of other  
 2 things. You've given the opinion that the RRIs  
 3 will have the effect of stimulating the Detroit  
 4 economy.

5 A Yes. That's correct.

6 Q Is that an opinion you will offer at trial  
 7 or simply an opinion you've reached in the  
 8 course of your work?

9 A Well, it's an opinion expressed in my  
 10 report and my assumption is that in the  
 11 proceeding, I will be testifying about all  
 12 elements of my report.

13 Q The reason I ask you is that we, at the  
 14 beginning of our deposition, I went through the  
 15 numbered opinions up front, 1 through 7.

16 A Yes.

17 Q That wasn't one of those, but it does  
 18 appear later in your report. So I didn't know  
 19 whether or not there was a --

20 A Oh, I see.

21 Q I didn't know whether it meant anything or  
 22 it didn't mean anything.

23 A I -- I appreciate that.

24 Q Okay. But do I understand you correctly,  
 25 it's in your report, therefore, you may well

Page 188

1 phenomena, and is very often the case within  
 2 assessing the desirability of a project and  
 3 maybe a private project as well as a government  
 4 project, the impact, the immediate impact on  
 5 the economy will be considered as one important  
 6 factor to recognize.

7 Q Okay. Now, the total amount of RRIs is  
 8 projected to be about \$1.4 billion. That's  
 9 your understanding, correct?

10 A Yes.

11 Q And you understand most of that is going  
 12 to come from the City's own operations. Do you  
 13 understand that as well?

14 MR. SMITH: Objection. Form.

15 A Well, that remains to be seen.

16 Q But the projection is most of that money  
 17 is going to come from revenue the City  
 18 collects, correct?

19 MR. SMITH: Objection. Form.

20 A That's the City's -- that's the City's  
 21 representation.

22 Q Okay. If the City doesn't collect the  
 23 revenue, presumably, it can't spend the money.

24 A Well, that's not quite true either. It  
 25 can reallocate.

Page 187

1 offer that opinion --

2 A Yes.

3 Q -- when our trial comes?

4 A Yes.

5 Q Okay. Let me ask you a question here  
 6 about RRIs. Why would RRI spending be  
 7 stimulative?

8 A Well, this goes back to Keynes,  
 9 K-E-Y-N-E-S. Other things equal, an  
 10 expenditure by a government will have a  
 11 stipulate -- stimulative effect on an economy;  
 12 a direct immediate stimulative effect in the  
 13 sense that if the government is paving --  
 14 paving? I'm rushing ahead of myself. If the  
 15 government is paying a contractor to demolish a  
 16 structure, for example, then the money that is  
 17 paid, to some degree, will then be spent in the  
 18 locality in question. Manifesting as income to  
 19 others who, in turn, will spend some of that  
 20 money themselves manifesting as income to yet  
 21 others, and there is a cascading effect, so to  
 22 speak, which elevates aggregate income. And  
 23 also stimulates employment.

24 Q Okay.

25 A These phenomena -- broadly recognized

Page 189

1 Q Okay. Now, if the City was going to spend  
 2 this money anyway on something else, how does  
 3 it become stimulative if it chooses to spend  
 4 the money on an RRI instead?

5 A Well, the money that is being spent here  
 6 is not money that the City would have to spend  
 7 were it not relinquishing its obligation to its  
 8 creditors. So it actually represents a  
 9 transfer of income or a subsidy of sorts from  
 10 the creditors to the City. And it's that pool  
 11 of funds that the City will have that it  
 12 otherwise would not, in my view, that is going  
 13 to be financing reinvestment to a large degree,  
 14 if not entirely.

15 Q So maybe fair to say is that the spending  
 16 of that pool of funds, on whatever it's spent  
 17 on, that's stimulative.

18 MR. SMITH: Objection. Form.

19 A Well, there will be a stimulative effect  
 20 of that -- of the spending of money to some  
 21 significant extent irrespective of what that  
 22 money is spent on, but depending very much also  
 23 on where the money is spent.

24 In the extreme, just to pick a very simple  
 25 case, if the government -- rather the

<p style="text-align: right;">Page 190</p> <p>1 government or the City were to spend the money 2 for a study to be done by me, for example, or 3 for that matter, Ernst &amp; Young in Chicago, 4 right, the stimulative effect would be in 5 Chicago or here. So that is also a 6 consideration.</p> <p>7 Q Dr. Meyers, we would all stipulate that if 8 we paid you the money, it would be stimulative 9 no matter what we did.</p> <p>10 A In one sense at least it would be.</p> <p>11 Q There we go.</p> <p>12 In fairness, you mentioned this pool of 13 funds that's transferred from creditors to the 14 City because of the bankruptcy.</p> <p>15 A Not literally, of course, but you 16 understand what I'm --</p> <p>17 Q I understand.</p> <p>18 If the pool of funds isn't transferred at 19 all for the City to spend, can it be 20 stimulative to the City?</p> <p>21 A I'm not quite following.</p> <p>22 Q If the City never gets the money to spend 23 at all, is it stimulative?</p> <p>24 A The City never gets the money to spend at 25 all, is it stimulative? That is the scenario</p>	<p style="text-align: right;">Page 192</p> <p>1 along.</p> <p>2 A I'm happy to move it along.</p> <p>3 Q I asked a bad question, so let me just 4 direct you to Paragraph 75 on Page 48.</p> <p>5 A Yes.</p> <p>6 Q It says, "Limiting a potential 10-year 7 property tax rate increase to selected 8 fractions of average entertainment expenditure 9 for a very-low-income family."</p> <p>10 My question is only this: What does the 11 term "entertainment expenditure" mean?</p> <p>12 A Yes. It refers to the BLS estimate of how 13 much a family in a given income bracket spends 14 on entertainment.</p> <p>15 Q Okay. And so I need that -- I think you 16 know what I'm going to ask you next, which is 17 what kind of entertainment?</p> <p>18 A Very much a function of the preferences of 19 the individuals in question.</p> <p>20 Q Discretionary?</p> <p>21 A Yes.</p> <p>22 Q Okay. Let me just make sure I understand 23 what is and what is not entertainment.</p> <p>24 A Yes.</p> <p>25 Q Car repairs?</p>
<p style="text-align: right;">Page 191</p> <p>1 in which the City, in fact, pays its creditors 2 in which case manifestly it is not the money 3 foregone by the creditors that provides the 4 stimulation.</p> <p>5 Q Okay. Do you know any analysis under 6 which the City could pay its creditors and also 7 have the money for the RRIs?</p> <p>8 A I'm not aware of that.</p> <p>9 Q Okay. Let me ask you a little bit 10 about -- you spend some time in your report -- 11 pardon me -- speaking about a potential tax 12 increase. Okay. I believe that's towards the 13 back of your report. You remember your -- your 14 analysis of that, I assume.</p> <p>15 A Oh, yes. Yes.</p> <p>16 Q Okay. And I just have some questions 17 about this, something I don't understand. I 18 think it starts -- or maybe it doesn't, but I 19 think it starts on Page 48, Paragraph 75, 20 something called, "Entertainment Expenditure." 21 And I'm assuming that's an economic -- or 22 sorry, an economist's term of art of some sort.</p> <p>23 A I, frankly, don't know what you mean by an 24 "economist's term of art," I must tell you.</p> <p>25 Q I'm sorry. I was trying to move this</p>	<p style="text-align: right;">Page 193</p> <p>1 A Not entertainment.</p> <p>2 Q Food?</p> <p>3 A Not entertainment.</p> <p>4 Q Rent?</p> <p>5 A Not entertainment.</p> <p>6 Q Okay. Expenses associated with education, 7 like buying children's textbooks or something 8 like that?</p> <p>9 A Not entertainment.</p> <p>10 Q Clothing?</p> <p>11 A Nor is that entertainment.</p> <p>12 Q Okay. Cell phones?</p> <p>13 A Interesting borderline case, but I would 14 say not entertainment.</p> <p>15 Q Probably would have given a different 16 answer 10 years ago.</p> <p>17 A Absolutely.</p> <p>18 Q I'm actually not sure that is a fair 19 question. Didn't mean to be unfair though.</p> <p>20 Okay. And so entertainment would be 21 something like going to a movie?</p> <p>22 A Sure.</p> <p>23 Q Or going to a restaurant?</p> <p>24 A Sure.</p> <p>25 Q Taking a vacation?</p>

	Page 194	Page 196
1 A Yeah.		1 addressing here, a family with an annual income
2 Q Is there anything else you can think of		2 of only \$10,000.
3 that it easily falls in entertainment?		3 So in other words, let's say -- and I'm
4 A I would have to think about it.		4 just using illustrative numbers now -- that
5 Q All right. Understood.		5 such a family typically spends \$500 a year on
6 I assume there are certain things that are		6 entertainment. In that event, the \$148 yield
7 on the borderline that maybe depend on for one		7 on the first of the alternative property tax
8 family, it's entertainment, and for another		8 increases would be 148 divided by 500.
9 family, it's not. I can't think of anything,		9 Actually, whatever percentage that is,
10 but I assume there is a gray area somewhere.		10 approximately 30-odd percent maybe, I don't
11 A There are always a gray areas.		11 know; in point of fact because average
12 Q And so your analysis, and now -- oh, by		12 expenditures on entertainment for such a family
13 the way, on Page 49, you say, "Because property		13 are higher, the percentage would be only 15 in
14 tax payments are tax deductible."		14 that instance.
15 Do you see that Paragraph 76?		15 The next column shows the result of the
16 A Yes.		16 same sort of analysis, but for a higher income
17 Q It's true, is it not, that people below a		17 family, 25,000. Which corresponds roughly to
18 certain income level usually do not itemize		18 median family income in the City, I think. And
19 their tax deductions?		19 in any case -- oh, well, that relates to
20 A Oh, of course.		20 another parameter that's -- that's -- that I
21 Q Okay. So let me look at -- go to Page 50,		21 employ here, which is the City relative to
22 Table 2, you have these "Ten-year Property Tax		22 other cities in terms of tax burden, given
23 Increase: Homeowner Burden." Okay. And the		23 these alternative hypothetical tax increases,
24 first one is a family with \$10,000 worth of		24 both before and after these hypothetical
25 income. Are we in the same --		25 alternative tax increases. And that is in
	Page 195	Page 197
1 A Oh, yes. I'm with you.		1 short or long, depending on your point of view,
2 Q Okay. And then you have various variables		2 what the first panel of this table seeks to
3 and ranges and all those that talk about what		3 portray.
4 percentage of their income would be		4 Q I see. Is there a rule of thumb that you
5 entertainment income.		5 are aware of that would tell us what percentage
6 Maybe I've screwed this up. Let me just		6 of a family's income usually is considered
7 ask this: What does this chart purport to		7 entertainment income?
8 show?		8 A A rule of thumb?
9 A Well, several things. Let's confine		9 Q A rule of thumb.
10 ourselves, first of all, to the property tax		10 A I don't know.
11 increase component. The first column specifies		11 Q Okay. So these numbers here are not
12 hypothetical increases in the tax rate in		12 necessarily saying this is what a family would
13 mills, relevant to the current 20-mill rate,		13 have as entertainment income, it's illustrative
14 approximate 20-mill rate.		14 of what the numbers look like if you assume
15 The second column indicates the		15 that entertainment income is 15 or 20 or 25?
16 implications of that for the owner of a home		16 A No. Those are not hypothetical numbers.
17 with a value of \$39,100, which is the median		17 These are numbers the Bureau of Labor
18 value as of 2012, as computed by the Census		18 Statistics derives via household surveys.
19 Bureau based on homeowner self-reporting.		19 Q I see. So if we just look at the chart at
20 Let's assume that it's accurate.		20 the top, we have different percentages of
21 Q Uhm-uhm.		21 average annual expenditure on entertainment for
22 A The third column indicates the percentage		22 a 10K income family.
23 of average annual expenditure on entertainment.		23 Do you see that? 15, 20 and 25 percent?
24 That the associated property tax increment		24 Do you see that?
25 would represent four -- in the first column I'm		25 A Yes. Yes.

	Page 198		Page 200
1	Q Which one of those is the correct one?	1	Q Okay. Have you attempted to convert that
2	A They are all correct. They all simply	2	absolute dollar amount into millages?
3	assume different incremental tax increases.	3	A I'm sorry. Millages?
4	Q I see. So where does the data from the	4	Q Into millages. Property tax millages.
5	Bureau of Labor Statistics come in?	5	A No, I have not done that.
6	A It provides us with the absolute dollar	6	Q How would one go about doing that?
7	amount that in this instance a 10K income	7	A Well, you could follow the same approach
8	family spends on entertainment.	8	essentially that I do here, no doubt
9	Q Okay. Is that regionalized or is that	9	culminating in a millage increase that is very
10	just Detroit?	10	large.
11	A That's national, I believe.	11	Q Okay. Now, your analysis here speaks
12	Q Okay.	12	about millage increases in -- and correct me
13	MR. STEWART: We've been on record about	13	when I misstate this, as I know I will --
14	an hour. Let's take a break. I'm going to	14	millage increases that could be imposed without
15	check my notes to see what we can do to maybe	15	seriously adversely effecting the City's
16	wrap this up quickly.	16	economy.
17	THE VIDEOGRAPHER: The time is 2:01 p.m.,	17	Is that a fair summary, what I just said
18	and we're going off the record.	18	or is that --
19	(Whereupon, a short recess was taken.)	19	A I believe it is, yes.
20	THE VIDEOGRAPHER: The time is 2:10 p.m.,	20	Q Okay. And what is the millage you believe
21	and we are back on the record.	21	could be imposed, the maximum millage, that
22	BY MR. STEWART:	22	would not seriously adversely affect the City's
23	Q Okay. Dr. Meyers, before our break, we	23	economy?
24	were talking -- pardon me -- about	24	MR. SMITH: Objection. Form.
25	entertainment expenditure of families and	25	A Well, I believe the millage rates
	Page 199		Page 201
1	things like that. That was part of the topic	1	described here are not such as to have a
2	you went into in your report in connection with	2	material adverse effect on the City's economy.
3	the analysis you did about possibly raising	3	Q Okay. What page are you on when you --
4	property taxes in the City, correct?	4	A Well, I'm looking for convenience at
5	A Yes.	5	Table 2, but those same rates are discussed,
6	Q And the purpose of raising property taxes	6	cited elsewhere as well.
7	would be to raise money with which to pay	7	Q Okay. So these -- we're looking at
8	creditors?	8	increases in mills between 7.4 and 12.6 mills,
9	A Yes.	9	correct?
10	Q Okay. Have you determined how much in	10	A Yes.
11	total amount would be needed to be raised to	11	Q And now you have some more charts --
12	pay the creditors?	12	A Over a 10-year period, I might add. These
13	A I understand that it to be several billion	13	are not permanent increases.
14	dollars, but I cannot be more precise about it	14	Q Right. It says, for example, "7.6 mills
15	than that. Mr. -- who is it? I'm sorry, give	15	per year for 10 years."
16	me a moment to remember the name. Mr. -- I'm	16	A Well, an additional 7.6 over the 20 that's
17	blinking out on it. The City's chief financial	17	currently dedicated to general fund property
18	advisor.	18	tax.
19	Q Maybe Mr. Hill?	19	Q Okay. And I thought I -- I thought I was
20	A No. Outside fellow, Capital Markets guy.	20	on the same page and now I'm -- I'm not sure I
21	Q Buckfire?	21	am. The 7.6 mills we see here on Table 2 --
22	A Yeah.	22	A Yes.
23	I believe he presented a table which	23	Q -- is that a millage imposed every year or
24	indicates his view of how much the creditors	24	is that 7.6 mills over a 10-year period?
25	would have to be paid.	25	A No. No. Every year it would be

<p style="text-align: right;">Page 202</p> <p>1 incremental to the 20 mills that are imposed 2 for a 10-year period.</p> <p>3 Q Okay. Got it. Okay.</p> <p>4 Let's look -- now we're going to look at 5 some more charts. I told you I was done with 6 charts, but I saw some more.</p> <p>7 Back on Page 100 of your report, which is 8 Exhibit 9, we have some more charts here. Do 9 you have that before you?</p> <p>10 This is the one I'm on (indicating). I'm 11 on the very first one.</p> <p>12 A Yes, I see.</p> <p>13 Q Okay. And these are all reports -- sorry, 14 these are all charts that you prepared. Okay. 15 And the first of these speaks about the average 16 expenditure on entertainment that we just 17 talked about a minute ago, correct?</p> <p>18 A It incorporates that statistic, yeah.</p> <p>19 Q And then the second one, which is on 20 Page 2, talks about homeowner burden for the 21 10-year property tax increase, and that has 22 that 7.6 number I just asked you about a moment 23 ago as well. Okay.</p> <p>24 The third one, now I'm on Page 102, please 25 tell me what this chart would demonstrate.</p>	<p style="text-align: right;">Page 204</p> <p>1 Kansas City on the far right.</p> <p>2 A Yes.</p> <p>3 Q Okay. Do you have here, or anywhere in 4 your work, a statement of the actual millages 5 for each of those cities, as opposed to what we 6 have here which is the tax burden?</p> <p>7 A No, I do not. I may have some -- 8 actually, I do have a bit of millage 9 information -- information for some of the 10 other cities, but by no means comprehensive.</p> <p>11 Q Okay. Are there any that you happen to 12 know, as you sit here today?</p> <p>13 A Let me think. I'm sorry. I just don't 14 recall what they are.</p> <p>15 Q Perfectly fine.</p> <p>16 Next chart on Page 103, fair to say that's 17 similar to the chart we just looked at, but 18 instead dealing with a family that had a 19 \$50,000 income?</p> <p>20 A Yes.</p> <p>21 Q All right. Next chart, "Inbound Computer 22 Tax," can you tell me what this chart 23 represents?</p> <p>24 A Well, for the three alternative annual 25 flat taxes assessed here, that is \$147, 244 and</p>
<p style="text-align: right;">Page 203</p> <p>1 A Yes. This chart is derived from data 2 contained in the District of Columbia analysis 3 of comparative municipal tax burdens in various 4 cities. I actually believe it's the largest 5 city in each state of the union. And it shows 6 where Detroit stands currently, vis-a-vis the 7 other cities listed in terms of the degree of 8 burden for a \$25,000-income family.</p> <p>9 You'll find that under the word "current" 10 toward the right of this chart, indicating that 11 currently Detroit ranks -- I don't know, 12 eyeballing it, 25th or something like that from 13 the top, in terms of size of burden for such a 14 family given the overall taxes imposed within 15 the City.</p> <p>16 The bar that is to its left shows where 17 Detroit would stand, vis-a-vis the other 18 cities, where the median-sized tax increase 19 evaluated in this report to be imposed for the 20 10-year period.</p> <p>21 In other words, it increases the overall 22 burden by about eight-tenths of a percentage 23 point.</p> <p>24 Q And it compares to a series of other 25 cities, with Honolulu on the far left and</p>	<p style="text-align: right;">Page 205</p> <p>1 342. This chart indicates the percentage of 2 expenditure on entertainment that those amounts 3 would represent in the case of a family with a 4 \$45,000 income as of 2012.</p> <p>5 Q Okay. By the way, we have been looking at 6 these previous charts, the ones in 102 and 103, 7 if we can just back up a page, one of those was 8 for the family with the \$25,000 income, and the 9 other was for the family with a \$50,000 income, 10 correct?</p> <p>11 A Yes.</p> <p>12 Q Is there any reason why we don't have a 13 chart for the family with a \$10,000 income, 14 which your table spoke of?</p> <p>15 A Let's just take a moment here. 10,000, 16 25,000. You know, no reason at all. I had 17 actually thought that there was.</p> <p>18 Q Neither here nor there. Okay.</p> <p>19 Let's go back to 105, that's another 20 Inbound Commuter Tax chart for a family with 21 income of \$48,880.</p> <p>22 A Yes.</p> <p>23 Q And this shows -- is this the percentage 24 of average income overall or the percentage of 25 income spent on entertainment?</p>

	Page 206		Page 208
1 A	Oh, income overall.	1 A	Correct.
2 Q	Income overall.	2 Q	Red which is an increase in property tax; and blue which is the inbound commuter tax I just asked you about.
3	So this is just the increase it would --	3	
4	it would cause or is this the existing tax	4	
5	rate?	5	A Yes.
6 A	No. This tax does not exist at present.	6 Q	Okay. Good.
7 Q	I see.	7	MR. STEWART: Okay. Dr. Meyers, I want to thank you for your time.
8 A	This chart shows, for example, that were one to impose \$147 per year tax on -- of one form or another on inbound consumers, that that \$147 would represent three-tenths of 1 percent of the income of such a family.	9	THE WITNESS: Oh, thank you. Thank you for your courtesy and circumspection and whatnot.
10		10	MR. STEWART: Off the record.
11		11	MR. SMITH: You know, I might have one or two questions.
12		12	MR. STEWART: Anyone else have questions?
13 Q	Okay. And the tax you're speaking of, is this an income tax or is it some other kind of tax?	13	MR. SMITH: Anybody on the phone right now?
14		14	EXAMINATION BY
15		15	MR. SMITH:
16 A	No. As -- as the example used in my report is the tax that would be -- well, let's backstep here. I wouldn't characterize this as income tax. I would characterize this as a flat tax. And to be sure any tax is a tax on income ultimately, but for wealth taxes, which actually themselves end up becoming taxes on income and so on. So as I said, I would characterize this more as a -- as a flat tax.	16 Q	You were just asked about the additional revenue.
17		17	Is it your opinion that there is additional revenue for creditors that's available?
18		18	A Yes.
19		19	
20		20	
21		21	
22		22	
23		23	
24		24	
25 Q	Is this a new tax or an increased --	25	
	Page 207		Page 209
1 A	This would be a new tax.	1 Q	And is there additional revenue even beyond what you have calculated, you know, that you have seen the State acknowledge or other experts in the case?
2 Q	Okay. And it would be a tax that said something like, If you're a commuter into Detroit, you've got to -- in addition to whatever else you're paying, you also have to now pay this new tax?	2	
3		3	
4		4	
5		5	A Yes.
6		6 Q	And is that -- is additional revenue available if the petition is dismissed, as well, to creditors?
7 A	Yes.	7	
8	MR. SMITH: Objection to form.	8	
9 Q	Okay. Now, the last of your charts, which is Page 106, that -- tell me what that -- what that says.	9	
10		10	A Yes.
11		11	MR. SMITH: I think that's all I have.
12 A	Well, this chart illustrates the -- our estimates of the added revenue that would be available for creditors given what I view to be a more plausible property tax revenue forecast, coupled with the commuter tax as estimated.	12	MR. STEWART: Okay. Just a few. This is what lawyers -- I know --
13		13	MR. SMITH: I shouldn't have opened my mouth.
14		14	THE WITNESS: I couldn't agree more.
15		15	
16		16	CONTINUED EXAMINATION
17		17	BY MR. STEWART:
18 Q	Okay. Well, let's break it down.	18 Q	Mr. Smith just asked you couple of questions about additional revenue. Just please tell me, if you could, what is this additional revenue?
19	The green part is what you think would be a more plausible --	19	
20 A	And pardon me. I omitted the property tax increase.	20	
21		21	
22 Q	That's the red part.	22 A	Well, it's reflected in the exhibit we just discussed.
23 A	I'm sorry.	23 Q	Which --which --
24 Q	So we have green which is the forecasting --	24 A	The chart on page -- in several places
25		25	

Page 210

1 it's indicated in the report. But since we're  
 2 just discussing it, let's go to -- excuse me.  
 3 I'm not accustomed to two-sided copies. I  
 4 don't conserve as much as I should on trees and  
 5 forest, but just can't get used to it.

6 It's Page -- oh, no, no. It's Page 106.

7 Q Okay.

8 A One way of looking at it. These are  
 9 revenues which I am suggesting constitute added  
 10 funds potentially available to creditors were  
 11 the corrections I proposed with respect to  
 12 property tax forecast, and the 10-year property  
 13 tax increase discussed, and the inbound  
 14 commuter tax or something like it imposed.

15 Q Right. I believe, though, Mr. Smith's  
 16 question had been additional sources of revenue  
 17 beyond what's in your report.

18 A Oh, I'm sorry. Yes, of course.

19 Q That's my question.

20 A Yeah. I have not here added in such  
 21 things as asset sales or leases. I have not  
 22 factored in at all the collection of increased  
 23 income tax collections through the  
 24 piggy-backing and whatnot.

25 I have -- what else have I not included

Page 212

1 A We're talking about this; am I right  
 2 (indicating)?

3 Q Exactly so.

4 THE WITNESS: Am I obligated to return  
 5 this document to anyone?

6 MR. STEWART: The Reporter will keep it,  
 7 but we have extras if you'd like it.

8 THE WITNESS: Never mind. That's fine.

9 A Let me see, there should be consistency  
 10 here. One second. Yes, there appears to be.

11 Cross-referencing this chart with the  
 12 table in the first -- after the first couple of  
 13 pages of the report. It's on Page 4 actually  
 14 of the report.

15 Are you there?

16 Q Yeah.

17 A The 999 total in the chart corresponds to  
 18 the 998.7 in the final row of the table, the  
 19 first column in the final row of the table.  
 20 You see total incremental revenue,  
 21 998.7 million?

22 Q Uhm-uhm.

23 A Okay. That corresponds to that.

24 Similarly, the 1,256 in the next stack of  
 25 segments corresponds to the 1,256 in the table,

Page 211

1 here? I know there are other things. I have  
 2 not made any numeric adjustment for the -- what  
 3 is in my view the likelihood that revenue  
 4 sharing will increase in coming years.

5 I understand that other witnesses may be  
 6 testifying to the value on liquidation of  
 7 various City properties. I have not made any  
 8 allowance or proposal in that respect at all.

9 Indeed, I am proposing nothing here other  
 10 than the adoption of certain ideas and  
 11 qualifications, and there may well be other  
 12 sources of revenue for the City that I've not  
 13 touched upon sufficiently.

14 MR. STEWART: Okay.

15 MR. ULLMAN: Actually, I just have one  
 16 question.

17 EXAMINATION BY

18 MR. ULLMAN:

19 Q I'm looking at Page 106 in the chart you  
 20 were focusing on, and I was just trying to tie  
 21 those numbers back to other numbers in your  
 22 report and I was having trouble doing that.

23 A Sure.

24 Q So I was wondering if you could just show  
 25 me where they all come from.

Page 213

1 the front of the second -- or rather third  
 2 column -- or second column of numbers.

3 Q Right.

4 A And so on.

5 MR. ULLMAN: Okay. I think that does it.  
 6 Thank you.

7 THE WITNESS: Sure.

8 MR. SMITH: No, I don't have any more  
 9 questions.

10 THE VIDEOGRAPHER: The time is 2:29 p.m.  
 11 on August 1, 2014, and this completes the  
 12 videotaped deposition of Dr. Glenn Meyers.

13 (Whereupon, at 2:29 p.m., the Examination  
 14 of this Witness was concluded.)

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17 GLENN MEYERS

18

19 Subscribed and sworn to before me  
 20 this \_\_\_\_ day of \_\_\_\_\_, 2014.

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22

23 NOTARY PUBLIC

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Page 214

1 CERTIFICATION  
2 STATE OF NEW YORK )  
3 : SS.:  
4 COUNTY OF NEW YORK )  
5 I, CHANDRA D. BROWN, a Notary Public for  
6 and within the State of New York, do hereby certify:  
7 That the witness whose examination is  
8 hereinbefore set forth was duly sworn and that such  
9 examination is a true record of the testimony given  
10 by that witness.

11 I further certify that I am not related to  
12 any of the parties to this action by blood or by  
13 marriage and that I am in no way interested in the  
14 outcome of this matter.

15 IN WITNESS WHEREOF, I have hereunto set my  
16 hand the 4th day of August, 2013.

Chandra D. Brown

17 \_\_\_\_\_  
18 CHANDRA D. BROWN, RPR, CLR  
19  
20  
21  
22  
23  
24  
25

**CERTIFICATE OF SERVICE**

I, David G. Heiman, hereby certify that the foregoing *City of Detroit's Reply to Syncora's Response in Opposition to the City of Detroit's Motion for Leave to Serve the Supplemental Expert Report of Caroline Sallee* was filed and served via the Court's electronic case filing and noticing system on this 20th day of August, 2014.

/s/ David G. Heiman